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Final Supplemental Environmental Impact Statement

For the

Beaverhead-Deerlodge National Forest Land and Resource Management Plan to Comply with the District of Montana Court Order

Beaverhead and Jefferson Counties, Montana

Final Supplemental Environmental Impact Statement for the Beaverhead-Deerlodge National Forest Land and Resource Management Plan To Comply with the District of Montana Court Order

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Abstract: In an April 2, 2012 Order, the U.S. District Court for the District of Montana directed the Forest Service to apply the minimization criteria mandated by Executive Order 11644 at the route-specific level where specific snowmobile routes are delineated in the 2009 Beaverhead-Deerlodge National Forest Plan. This Final Supplemental EIS evaluates potential effects relevant to applying the minimization criteria to the three routes specifically designated in the Forest Plan as exceptions to winter, non-motorized areas.

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This Final Supplemental Environmental Impact Statement (FSEIS) evaluates potential effects relevant to applying the minimization criteria established in Executive Order (EO) 11644[1] at the route-specific level where snowmobile routes were delineated in the 2009 Land and Resource Management Plan[2] (Forest Plan) for the Beaverhead-Deerlodge National Forest (BDNF).

Background

Changes Draft to Final

Information about a Court ordered time extension has been added. In addition, other information was included to add to and clarify the analysis.

2009 Forest Plan

In a Record of Decision (ROD) dated January 14, 2009, Regional Forester Thomas Tidwell approved the 2009 Forest Plan for the Beaverhead-Deerlodge National Forest (often referred to as the Revised Forest Plan or RFP). The 2009 Forest Plan provides management direction for activities on the BDNF for the next 10-15 years, including direction on eight revision topics (vegetation, wildlife, aquatic resources, recreation and travel management, fire management, livestock grazing, timber and recommended wilderness). This direction replaced previous management direction from the 1986 Beaverhead National Forest Plan and the 1987 Deerlodge National Forest Plan.

As part of addressing the recreation and travel management revision topic, the Forest Plan prescribed motorized and non-motorized allocations for large blocks of land. Pages 14-15 of the 2009 ROD disclose decision rationale to allocate an additional 24% of the Forest to winter non-motorized recreation (resulting in a 40% winter non-motorized allocation compared to the 16% allocation in the prior Plans). In other words, this decision resulted in additional motorized closures across the Forest. No routes or areas closed to snowmobile use under the prior plan were "opened" with this revision. As such, the 2009 Revised Forest Plan, resulted in more acres allocated for quiet, non-motorized winter use.

Forest Plan Related Motorized Closures

As explained in the 2009 ROD (pg. 23), the Forest Plan established desired conditions, standards and allowable uses but did not make site specific decisions such as closing individual motorized routes in areas recommended for wilderness. In the 2009 ROD, the Regional Forester directed the Forest Supervisor to issue a second ROD, based on the analysis in the Corrected FEIS, making site-specific decisions closing areas and routes to motorized use based on Revised Forest Plan direction and signing and enforcing those closures.

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[1] EO 11644 – "Use of Off-Road Vehicles on the Public Lands" - is included as Appendix A. Forest Service regulations at 36 CFR 212 Subpart B implement Executive Order 11644 as amended by Executive Order 11989.

[2] The 2009 Forest Plan, Corrected FEIS, Forest Plan ROD and the 2010 ROD Enacting Forest Plan Travel Management Direction for Certain Areas of the BDNF are electronically available at: http://fs.usda.gov/goto/bdnf/forest-plan.

Forest Supervisor David Myers signed the ROD Enacting Forest Plan Travel Management Direction for Certain Areas of the Beaverhead-Deerlodge National Forest on February 12, 2010. Decisions documented in this ROD include closing areas to winter motorized travel allocated in the 2009 Forest Plan to winter non-motorized prescriptions from December 2 through May 15. Special Order 2010-BD-032, signed by Forest Supervisor David Myers July 6, 2010, implemented the decisions in the 2010 ROD and initiated enforcement of these motorized closures.

Motor Vehicle Use Maps

The 2009 ROD (pg. 23) also described another stage of travel planning designating routes for motorized travel under 36 CFR 212 which would result in publication of Motor Vehicle Use Maps (MVUM) for the BDNF. This phase of travel analysis is being conducted area by area across the Forest.

On March 3, 2011, Forest Supervisor David Myers signed the Decision Notice for Designation of Summer Motorized Travel on the Madison Ranger District. This decision was implemented October 14, 2011 with publication of MVUMs for the Gravelly and Tobacco Root Mountains.

U.S. District Court

On September 7, 2010, Wildlands CPR, Inc., Friends of the Bitterroot, Inc., and Montanans for Quiet Recreation filed a complaint in U.S. District Court for the District of Montana (Case 98:10-cv-00104-DWM) alleging inadequate analysis of the impacts of winter motorized travel when developing the Forest Plan and failure to analyze criteria intended to minimize off-road vehicle impacts.

In an Order dated April 2, 2012, the U.S. District Court for the District of Montana found the Forest Service had adequately applied the minimization criteria of EO 11644 for areas generally open to snowmobile use. However, the court found “to the extent that specific routes have been designated for snowmobile use”, the Forest Service failed to show it adequately applied the minimization criteria at the route-specific level. The court ordered as follows: “that this case is remanded to the Forest Service for the limited purpose of applying the minimization criteria mandated by EO 11644 at the route specific level where specific snowmobile routes are designated. The Forest Service shall perform this analysis and update the Revised Forest Plan by September 30, 2012. A failure to do so will result in the suspension of the winter travel management portion of the Revised Forest Plan as of October 1, 2012.”

In an Order dated October 15, 2012, the U.S. District Court for the District of Montana extended the deadline for complying with the court order to November 16, 2012.

Purpose of this FSEIS

This FSEIS evaluates the potential effects relevant to applying the minimization criteria established by EO 11644 at the route-specific level where snowmobile routes were designated in the 2009 Forest Plan, as directed by the U.S. District Court for the District of Montana in an Order dated April 2, 2012.

This FSEIS provides additional environmental analysis for the three routes designated in the Forest Plan as exceptions to winter, non-motorized areas. Maps displaying the routes are available as Appendix B in this FSEIS. There is a Vicinity Map followed by the three Management Area Maps from the Forest Plan which show the designated routes. These routes are:

- Snowmobile use through the Electric Peak area near Thunderbolt Creek and Cottonwood Lake (Jefferson County, Montana),
- Snowmobile use through the non-motorized area on the Road #056 corridor in the vicinity of Antelope Basin (Beaverhead County, Montana), and
- Snowmobile use on the road to Antone Cabin in the southwest portion of the Snowcrest Mountains (Beaverhead County, Montana).

No other snowmobile routes were specifically designated in the Forest Plan.

Public Involvement

On June 6, 2012, a notice of intent to prepare a Supplemental EIS in response to the April 2, 2012 Order from US District Court for the District of Montana, appeared in the Federal Register.

On July 17, 2012, a letter was sent to 651 individuals, organizations, tribes, and state and federal government agencies, giving them notice of publication availability and initiating a 45-day comment period. The letter was accompanied by a Notice of Availability published in the Federal Register on Friday, July 20, 2012. The comment period ended on September 4, 2012. As a courtesy, a legal notice was posted in the Montana Standard as well.

During the comment period six individuals, agencies or organizations called with, or sent, their comments regarding the Supplemental EIS. Their concerns and the Forest Service responses are attached in Appendix C.

Minimization Criteria

Section 3(a) of EO 11644 directs agencies to develop and issue regulations to provide for administrative designation of the specific areas and trails on public lands on which the use of off-road vehicles may be permitted. Regulations shall direct that the designation of such areas and trails will be based upon the protection of the resources of the public lands, promotion of the safety of all users of those lands, and minimization of conflicts among the various uses of those lands. Section 3(a) further specifies that regulations shall be in accordance with the following:

- Areas and trails shall be located to minimize damage to soil, watershed, vegetation, or other resources of the public lands.
- Areas and trails shall be located to minimize harassment of wildlife or significant disruption of wildlife habitats.
- Areas and trails shall be located to minimize conflicts between off-road vehicle use and other existing or proposed recreational uses of the same or neighboring

public lands, and to ensure the compatibility of such uses with existing conditions in populated areas, taking into account noise and other factors[3].

- Areas and trails shall not be located in officially designated Wilderness Areas or Primitive Areas. Areas and trails shall be located in areas of the National Park system, Natural Areas, or National Wildlife Refuges and Game Ranges only if the respective agency head determines off-road vehicle use in such locations will not adversely affect their natural, aesthetic, or scenic values[4].

Route-Specific Analysis

Electric Peak (Trail 7065)

Table 1. Motorized Use Status Before and After Forest Plan Revision

	Before Revision	After Revision
Trail 7065 – Snowmobiles	Open	Open
Area around Trail 7065 – Snowmobiles	Open	Closed
Trail 7065 – Summer wheeled motorized	Closed	Closed

Page 94 of the Forest Plan displays a map of the Electric Peak Management Area (MA) located in the Boulder River landscape north of Butte and south of Helena, Montana (also included in Appendix B of this FSEIS). The cross-hatched area on this map displays an area where summer and winter motorized travel is not allowed. The yellow line traveling north along Thunderbolt Creek to Cottonwood Lake then west towards Rock Creek is an exception to the winter motorized travel not allowed restriction. A Forest Plan Standard specific to the Electric Peak MA confines snowmobiling to designated routes (Forest Plan, pg. 95).

This trail is 5.2 miles in length. It includes Trail #7065 along Thunderbolt Creek to Cottonwood Lake, a system, non-motorized trail during the summer. In winter, this route is part of the larger 12 mile long Cottonwood Lake Loop Snowmobile Trail. The loop is popular with local area snowmobilers, and has been groomed by the Deer Lodge Snowmobile Club under an agreement with the Forest Service for more than 35 years

The 5.2 mile Thunderbolt Creek segment was retained as an exception to the area winter motorized closure because it was key to providing this continued loop opportunity. The route provides a backcountry snowmobile experience not available for the remainder of the routes in the Boulder River landscape, since they are largely located on main roads.

The route has been an open winter motorized route and in use for more than 35 years prior to the 2009 Forest Plan (FEIS, pg. 647 and 917).

[3] Because these routes are not located near populated areas, there is no further discussion related to populated areas in the FSEIS.
[4] Because these routes are not located within Wilderness or other areas described in this section, there is no further discussion related to this criteria in the FSEIS.

Figure 1. View typical of terrain and vegetation on the Electric Peak route. Note, there is no evidence of soil erosion or vegetative disturbance attributable to snowmobile use on, or adjacent to, the route. Dense vegetation physically restricts snowmobile use to the route.

Winter motorized use was allowed in the area surrounding Trail 7065 prior to the Forest Plan Revision, as was use of this trail. The FEIS developed a range of alternatives which considered allocating or not allocating areas with important motorized routes and analyzing those effects by landscape. Alternative 6 was designed to retain this motorized corridor in the Electric Peak MA, while providing non-motorized allocations (Corrected FEIS, pg. 642, 739, 917 and 977). Alternative 6 Modified allocated 55% of the Electric Peak MA to winter non-motorized recreation opportunities. Motorized use was permitted throughout the area prior to revision.

Effects of the alternatives analyzed in the FEIS (including an exception to a winter, non-motorized allocation for this route) to recreation and travel management in the Boulder River landscape are described in the FEIS on pages 374-376. Comments on the Corrected FEIS from Montana Fish, Wildlife and Parks (MTFWP) and the Montana Wilderness Association specifically expressed support for the exception to the winter motorized travel not allowed restriction in the Electric Peak MA, retaining the snowmobile route.

Soil, Water, Vegetation & Other Resources

As disclosed in the Corrected FEIS (pg. 90), overall emissions from snowmobile use on the BDNF are unlikely to exceed National Ambient Air Quality or Montana Air Quality Standards since these standards have not been exceeded in the West Yellowstone area where snowmobile use is much heavier. Please refer to the discussion below concerning water quality and snowmobile use in Yellowstone National Park (YNP). Snowmobile use on the Electric Peak route is likely $1/10^{th}$ or less of the use that occurred between the

West Entrance of YNP and Old Faithful in 2004. Use of this single route by some winter, motorized recreationists at vastly lower concentrations than occurring in YNP is unlikely to exceed the same air quality standards. "Nuisance" emissions (emissions which alter desirable, clean-smelling air) are localized (along the route) and temporary (while snowmobiles are operating on the trail).

The Corrected FEIS finds impacts from snowmobile use on the BDNF to soil and vegetation are benign since these resources are buffered by snow during winter snowmobile use and the tracks vanish with snow melt (Corrected FEIS, pg. 289). Snowmobile use of the Electric Peak route also occurs when soil and vegetation are buffered by snow. Please refer to the above photo of this route (in the absence of snow). This trail will be maintained as compacted soil without vegetation to accommodate public travel during the summer months. This trail has been managed and maintained as a summer non-motorized and winter motorized trail for decades. There is no evidence snowmobile use has damaged soil or vegetation on, or along, this route.

In the mid-1990s, increased snowmobile use in Yellowstone National Park (YNP) created concerns the emissions could influence water chemistry in streams and rivers. This prompted research to determine if volatile organic compounds (VOCs) could accumulate in snow along snowmobile routes and impact aquatic resources during/after snowmelt. Arnold and Koel (2006) analyzed snowmelt water samples collected from snowmobile routes in YNP during 2003 and 2004.

Samples were collected near West Entrance, Madison Junction, and Old Faithful and analyzed for nine VOCs; including benzene, ethylbenzene, ethyl tert-butyl ether, isopropyl ether, meta and para-xylene (m- and p-xylene), methyl tert-butyl ether, ortho-xylene (o-xylene), tert-pentyl methyl ether, and toluene. Of these nine compounds only five occurred at levels that could be detected during the study. They were benzene, ethylbenzene, m- and p-xylene, o-xylene, and toluene.

Low levels of these five compounds were detected, on at least one occasion, at the West Entrance and at Old Faithful. They were most frequently detected at Old Faithful. In contrast, VOCs at Madison Junction were not above the analytical detection limit in any water samples collected during the sampling period.

The highest concentrations for VOCs measured during the study were substantially lower than EPA recommendations. The highest measured concentration of benzene was 0.0325 µg/L. The recommended fresh water acute criteria for this compound is 5,300 µg/L. The highest measured concentration of ethylbenzine was 0.7202 µg/L, while the recommended criteria is 32,000 µg/L. The highest measured concentration of toluene was 1.008 µg/L, while the recommended criteria is 17,500 µg/L. (Arnold and Koel, 2006).

The highest measured concentration of toluene was closest to the maximum recommended level; at a miniscule 1/17000th of the concentration level that would cause concern.

Half maximal effective concentration (EC_{50}) refers to the concentration of a toxicant which induces a response halfway between the baseline and maximum after a specified exposure time. The 96 hour EC_{50} for rainbow trout (the species closest to cutthroat trout for which there is data) for toluene ranges from 3,600 to 6000 µg/L (Arnold and Koel,

2006). The highest average concentrations of toluene, over a 96 hour period occurred at Old Faithful from 3/20 – 3/23/2004; averaging 0.4662 µg/L (Arnold and Koel, 2006). This, once again, is a miniscule 1/7700th of the concentration of the more conservative 3,600 µg/L EC_{50} threshold.

The number of snowmobiles entering YNP during the 2003 and 2004 winter seasons were 47,799 and 22,423 respectively (Arnold and Koel 2006). From 1996 through 2001 winter use data indicated about 70% of the snowmobile users entered YNP at the West Entrance (range 68.3% - 70.1%) (National Park Service 2002). Extrapolating this distribution of winter use to 2003 and 2004; with a winter use season that runs from December through March, indicates the traffic intensity entering YNP at West Entrance would average about 278 and 130 snowmobiles every day for 120 consecutive days, respectively for 2003 and 2004.

Comparatively, on the Wise River and Dillon Districts of the BDNF, two of the heaviest snowmobile use staging areas are qualitatively estimated to have 5-10 snowmobiles use them Monday through Friday; increasing to 15-20 on weekend days (Nathan Gassmann, pers. comm.). Using the high end of these estimates, pressures average about 13 snowmobiles per day at the staging areas. This is about 1/20th of the pressure seen in YNP at West entrance during 2003 and 1/10th of the pressure in 2004.

The West Entrance was one of the locations where snowmelt water was analyzed for VOCs (Arnold and Koel, 2006) and where concentrations were thousands of times lower than those which would cause concern.

Finally, Arnold and Koel (2006) measured VOC concentrations of the snowmelt water derived from the routes used by the snowmobiles (i.e. water with the highest concentrations possible). Their control was located 100 meters from a route where effects from snowmobile emissions are negligible. This suggests snow with the potential to contaminate surface water is also a miniscule portion of the snow within a drainage or watershed, since it is limited to the trails along which snowmobiles travel. Any contaminants entering streams from snowmobile trails would be diluted many orders of magnitude by the vast amounts of water derived from snowmelt away from the trails. This essentially precludes any potential for cumulative effects from VOCs at the watershed level.

Considering there is no real aquatic biological or water quality risk related to emissions from snowmobile use in YNP, there can also be no risk to those resources in Thunderbolt Creek or Cottonwood Lake from snowmobile use along Trail # 7065 where snowmobile use occurs at vastly lower concentrations levels.

Water quality has not been an issue with snowmobile use of this trail in the past. While Trail #7065 generally follows Thunderbolt Creek for much of its length, snow, terrain and use patterns appear to be providing adequate protection. Approximately 3.0 miles of the route is within 300 feet of Thunderbolt Creek and Cottonwood Lake. About 1.5 miles of the route is within 300 feet of the portion of Thunderbolt Creek occupied by westslope cutthroat trout (WCT). In 2009, two miles of the trail was moved to avoid wet areas, 40 drain dips or rolling dips and 3 poly pipes were installed and the trail grade was reduced to 8-12% to address safety, erosion, and resource issues.

Risk for water contamination are highest near concentrated use areas such as snowmobile staging areas or parking lots if they occur close to water (FEIS, pg. 137). However, for this particular trail, there is no set parking/staging area and winter recreationists may arrive at the trail from a number of possible parking/unloading locations usually five or more miles from the trail. Parking generally occurs near the east end of the plowed County road and locations vary by season, snow, and plowing conditions. These sites serve as winter recreation access points for the broader Electric Peak/Boulder River area, and their use would be expected to continue essentially unchanged regardless of whether Trail #7065 is open to snowmobiles or not.

Wildlife and Wildlife Habitat

The FEIS specifically addressed how the selected alternative reduced snowmobile impacts to wildlife and wildlife habitat by closing areas to motorized winter recreation. Non-motorized winter allocations increased from the existing condition of 16% across the Forest to 40% (Corrected FEIS, pg. 39). Also, forest-wide the percent of big game winter range closed to winter motorized use increased from 26% to 43% (Corrected FEIS, page 510, Table 176).

The Electric Peak MA (the location of the 5.2 mile snowmobile trail) is in the Boulder River landscape where winter motorized allocations were reduced by over 57,000 acres, from 189,122 acres to 131,451 acres (Corrected FEIS, pg. 376). Specifically, in the Boulder River landscape the percent of big game winter range closed increased from 15% to 44% and the percent of wolverine denning habitat closed to snowmobiles increased from 0% to 55% (Corrected FEIS, pg. 510, Table 176). In fact, the Electric Peak MA includes more than 5,900 acres allocated to winter non-motorized recreation opportunities with additional acres available within the landscape, across the Beaverhead Deerlodge, and on the adjacent Helena National Forest

Concerning wildlife populations specific to the 5.2 mile snowmobile route, big game are minimally impacted as the route is not located in big game winter range (AR FSEIS-87) As such, there is little likelihood of any impact as big game species would not be present during snowmobile periods.

In terms of mountain goats, the route is not in an area identified by MFWP as an area of mountain goat distribution (AR FSEIS-54). The nearest populations are to the east in the Elkhorn Mountains and to the west in the North Flint Range above Deerlodge, Montana.

Forest Service sensitive species added to the BDNF list since the 2009 ROD include Rocky Mountain bighorn sheep and gray wolf as a result of the latter's delisting in 2011. There are no bighorn sheep populations anywhere along the Electric Peak Route, and the wolf has been analyzed as an endangered species with a formal Biological Opinion issued in 2010. The Fish and Wildlife Service (USFWS) concluded the effects of the Forest Plan on gray wolves are not likely to jeopardize the continued existence of this species. The Service's incidental take statement specifically focused on potential take of wolves due to livestock depredations. With no bighorn sheep populations in the area, no wolf packs in the area (Montana Fish, Wildlife and Parks 2012), and no livestock management associated with snowmobile use, continued use of this route will not cause a trend towards listing for either species.

Despite the absence of lynx on the BDNF, a consideration of the lynx management direction was completed for specific impacts of the Electric Peak route to lynx. The review confirms snowmobile use of the route is consistent with lynx management direction. The route and surrounding area were part of the environmental baseline for the Lynx Conservation Assessment and Strategy (2000) and the subsequent Northern Rockies Lynx Amendment (2007). The area bordering the trail was open to winter motorized recreation and is now closed under the Forest Plan. From a practical standpoint it is virtually impossible to leave the trail with a snowmobile due to the dense forest forming a barrier to machine access. No vegetation treatment is proposed.

The trail route traverses mapped lynx habitat. As previously noted, however, this route was included in the environmental baseline for the LCAS (2000) and subsequent Northern Rockies Lynx Amendment (2007). In compliance with the Lynx Amendment, no expansion of use has been authorized and the existing condition provides for lynx movement and maintains effectiveness of lynx habitat.

Table 2. Lynx LAU Habitat Analysis for Electric Peak Route

Electric Peak Route Components	Measure
LAU ID	85
LAU AREA	17,788 acres
LAU Open to Winter Motorized (1987 Plan)	17,788 acres
LAU Open to Winter Motorized (2009 Plan)	11,374 acres
LAU Winter Motorized Reduction	6,414 acres
LAU Acres of lynx Habitat	15,351 acres
Route Length in LAU	5.2 miles
Route Area in LAU	2 acres
Route Length in Lynx Habitat	4.9 miles
Route Area in Lynx Habitat	1.5 acres

No lynx linkage areas are affected by the Electric Peak Route, nor is there any vegetation treatment associated with using the trail. The actual route area in lynx habitat is fundamentally inconsequential at 1.5 acres within a 17,788 acre area. Lynx management is consistent with the Northern Rockies Lynx Management direction despite the species being absent from the BDNF (AR FSEIS-58).

Since adoption of the Forest Plan, new information (Copeland et.al. 2007 and Copeland et al 2010) was developed for wolverine associations with persistent spring snow, elevation and ungulate winter ranges. Copeland et al (2010) and Copeland et al (2007) clearly equate the association of persistent spring (April 24 – May 15) snow and higher elevations (>7800ft +) with wolverine distribution. **"**Evidence for the avoidance of low-elevation areas regardless of human presence has been reported for western North America and Norway (May et al. 2006; Copeland et al. 2007). Low-elevation, xeric habitats in the western US that provided winter range for ungulates were avoided by radio- marked wolverines, even though they contained an abundant food source (Copeland et al. 2007)" in Copeland et al 2010.

According to Copeland et. al. (2010), "Elevation was the key variable for distinguishing wolverine presence. It was the strongest and most consistent variable across all logistic regression models (Table 3). Wolverines preferred higher elevations (positive coeff.; P >0.25) in almost all models in which it was present. Use of high elevation was most

notable during summer when all elevations >2,400 m[5] were used more than expected and elevations <2,200 m used less than expected (Fig. 4). During winter, use shifted to the 2,400–2,600-m elevation zone with only the lowest elevations used less than expectation."

The elevation of the trailhead upstream of the Lady Smith parking area is approximately 6300 ft. and the maximum elevation is approximately 8300 ft. west of Cottonwood Lake. Based on elevation alone, little of the area traversed by the trail is expected to be preferred by wolverines.

Copeland's persistent spring snow model for the trail area shows a range of 0 to 4 years in seven from the lowest to highest elevations along the trail. Consequently, even the higher elevations along the route do not appear to provide much in the way of preferred habitat.

Table 3. Miles of persistent spring snow cover on Electric Peak Trail

Electric Peak Route	Measure
Spring Snow Cover 0 out of 7 Years	2.1 miles
Spring Snow Cover 1 out of 7 Years	1.0 miles
Spring Snow Cover 2 out of 7 Years	0.2 miles
Spring Snow Cover 3 out of 7 Years	0.9 miles
Spring Snow Cover 4 out of 7 Years	0.9 miles
Total Route Length	5.2 miles

Copeland et al 2010, April 24 – May 15
Miles by Cover Category (None exceed 4 out of 7 years)

Forest denning habitat models shows no such habitat along the route. The few small denning habitat polygons (3) are located in winter non-motorized areas, primarily in the adjacent Electric Peak Recommended Wilderness MA.

With the low elevations traversed, the lack of persistent spring snow and the absence of denning habitat along the trail, continued snowmobile use will not lead towards a trend to listing the wolverine.

Regarding impacts on grizzly bear, the BDNF recently re-initiated consultation with USFWS on the effects of implementing the 2009 Forest Plan on the remainder of the Forest outside the Yellowstone Grizzly Bear Ecosystem. This re-initiation of consultation encompasses all aspects of the 2009 Forest Plan including winter motorized use and allocations and was precipitated by the detection of an adult grizzly bear near Electric Peak in April, 2012.

On July 9, 2012, the BDNF submitted a Supplemental Biological Assessment (BA) to USFWS. This Supplemental BA (AR FSEIS-50) determined that in terms of access management and secure habitat the 2009 Forest Plan, while improving these conditions over time, may affect and is likely to adversely affect the threatened grizzly bear. The determination was based on existing summer and fall open motorized road and trail densities above desired conditions as described in the 2009 Forest Plan. Winter motorized recreation allocations was not a basis for this determination because use occurs when bears are in hibernation. In fact, the Supplemental BA discussed the 23% reduction in acres available for winter motorized recreation. The Forest Service's prior BA and the

[5] >2400 m = greater than 7,874 ft. --- >2200m = greater than 7,218ft…..2600m = 8530 ft.

USFWS's Biological Opinion (BO) on the Yellowstone Grizzly Bear Ecosystem portion of the Forest found little effect of snowmobiles on grizzly bears except for possible impact to females with cubs immediately after den emergence (AR Doc FSEIS-49: 31-33). The BO provides that the greatest probability of interactions at or near dens would be where potential denning habitat overlaps with open snowmobile areas and the influence zones around roads or routes.

In terms of the 5.2 mile snowmobile route in the Electric Peak MA, neither the route nor the trail's influence zone overlaps with any potential denning habitat (which are usually on 30 to 60 degree slopes with a mean elevation of 8845ft.) (AR FSEIS-50:45). Furthermore, there has been no documented denning activity in the area. Therefore, there is not expected to be any impact from snowmobile use on the route to any emerging females with cubs and there is not expected to be any impact from snowmobile use on the route during denning or with grizzly bear use of spring habitat.

Snowmobile use on the delineated route would not alter vegetation characteristics of wildlife habitat in the area because the vegetation is buffered by the snow. In addition, the use of the trail does not impact riparian areas or species associated with riparian areas as use is restricted to the footprint of the existing trail and use is during the winter when it has negligible impact.

2009 and 2010 monitoring of other areas with similar use on the BDNF indicate unauthorized (illegal) use to be low or non-existent, depending on the area, (AR FSEIS-106 and 108). The Forest is not aware of, and public comments did not identify any actual problems with off route use in this area since the Plan reallocated the area from a winter motorized to winter non-motorized setting in 2009. Should snowmobiles leave (illegally) Trail #7065, risks of wildlife harassment are low. The adjacent area is not big game winter range and does not include crucial habitat for grizzly bears or wolverines.

Off-Road Vehicle Use and Other Existing or Proposed Recreation Uses

The Revised Forest Plan (Alternative 6 Modified) reallocated the lands on either side of Trail#7065 from a winter motorized setting to what is now a winter non-motorized setting. The trail itself remains as it has been for decades; in summer it is a non-motorized trail and in winter, snowmobile use is permissible.

There have not been any reported public safety issues, conflicts, accidents or injuries associated with winter motorized use on Trail #7065.

Many non-motorized, winter recreationists prefer opportunities to ski or snowshoe in the absence of motorized winter use (snowmobiles). In the Electric Peak MA, skiing and snowshoeing opportunities in the absence of snowmobile use is now available on more than 5,900 acres (with additional areas available elsewhere on the Beaverhead Deerlodge and on the adjacent Helena National Forest). The 5.2 miles of snowmobile route bisects this non-motorized area. Since snow packed down by snowmobiles on the route makes travel on skis or snowshoes easier, some non-motorized users may choose to use the route to access the area closed to snowmobile use. Conversely, some non-motorized users will avoid the route to distance themselves from the sight and sound of motorized users.

While a few skiers take multi-day trips and winter camp, most skiers are limited to about 10 miles per day so day use generally occurs in relative close proximity to plowed roads

and parking areas (Corrected FEIS, pg. 352). The closest plowed parking area is located about 5 miles from the southern end of the Electric Peak route.

Some recreation users seek a sense of solitude and remoteness away from the sight and sound of people and machines. Other recreation users do not. Snowmobile use on the Electric Peak route would disrupt a sense of solitude for those seeking a quiet experience when both types of users are in the same area at the same time. Since the Electric Peak route bisects the non-motorized allocation, noise from snowmobiles also bisects the area. The distance this noise can be heard from the route is variable and depends on the type and number of snowmobiles using the route and air density. Noise is absorbed relatively quickly by the presence of deep snow, broken terrain, and contiguous, heavy timber along the route in the area. Depending on the day, snowmobile noise may be muted within a few hundred yards or be perceptible several miles away under certain environmental conditions.

Effects of this noise on individual users within earshot is highly subjective and, therefore, variable. That is, it largely depends on the expectations of the non-motorized user when they chose this area to ski or snowshoe. The Forest Plan intentionally and explicitly displays the size, location, and configuration of the motorized and non-motorized allocations so users can find locations to meet their various recreational pursuits and expectations. Those maps are displayed in the Forest Plan on pages 54 and 55, in addition to similar maps posted on the web so people may zoom in for greater detail. "Management area direction describing recreation settings will help Forest visitors to accurately anticipate the experience they will have when visiting a particular location", (ROD pg. 14 and 15).

2009 and 2010 monitoring of other areas with similar use on the BDNF indicate winter motorized use to be low or non-existent, depending on the area, (AR FSEIS-106 and 108). Heavy timber and steep, broken terrain in this area act as natural deterrents. The Forest is not aware of, and public comments did not identify any actual problems with off route use in this area since the Plan reallocated the area from a winter motorized to winter non-motorized setting in 2009. If it occurs, the greatest potential adverse effect in this particular area would be on the non-motorized user's recreational experience whose expectation should be to not encounter snowmobiles off of trail 7065. Now that the area has been closed to snowmobile use, mechanisms are in place to address illegal use should it occur, including enforceable prohibitions.

The route is not part of the CDNST. (AR FSEIS- 89) The only new, proposed non-motorized route in the vicinity is a trail for mountain bike use to avoid the nearby Electric Peak Recommended Wilderness MA. Winter motorized use of the Electric Peak route analyzed in this FSEIS does not influence a summer use proposal (still being developed) for mountain bikes.

Antelope Basin (Road 056)

Table 4. Motorized Use Status Before and After Forest Plan Revision

	Before Revision	After Revision
Road 056 – Snowmobiles	Open	Open
Area around Road 056 – Snowmobiles	Open	Closed
Road 056 – Summer wheeled motorized	Open	Open (highway vehicle)

Page 128 of the Revised Forest Plan displays a map of the Antelope Basin MA located in the Gravelly landscape south of Ennis and east of Dillon, Montana. The area on this map with "////" hatching displays an area where winter motorized travel is not allowed. The yellow line traveling north to south along the eastern edge of the map is an exception to the winter motorized travel not allowed restriction (see Antelope Basin MA map in Appendix B). A Forest Plan Standard specific to the Antelope Basin MA limits snowmobiles to the Road #056 corridor through this winter, non-motorized area (Forest Plan, pg. 129). The Forest Plan also specifies that this exception provides access to open areas beyond.

Further travel planning completed under 36 CFR 212 for the Madison Ranger District resulted in the October 14, 2011 publication of a Motor Vehicle Use Map (MVUM) for the Gravelly Mountain Range. The MVUM designates Road #056 as open to highway vehicles all year. Road #056 is not plowed. When snow makes the road impassable to highway vehicles, it is available for snowmobile use.

As displayed in Figure 2 below, Road #056 includes approximately 3.8 miles of road designated as a winter motorized exception on the BDNF. The entire road is located along the Continental Divide which forms the border between Montana and Idaho near Island Park, Idaho. (The Revised Forest Plan non-motorized exception part of Road #056 is illustrated in purple in Figure 2). Road #056 begins and ends in Idaho. Areas of the BDNF adjacent to this route used to be open to snowmobiling. Presently, this route simply provides a connection between areas open to winter motorized use on the adjacent Caribou-Targhee National Forest.

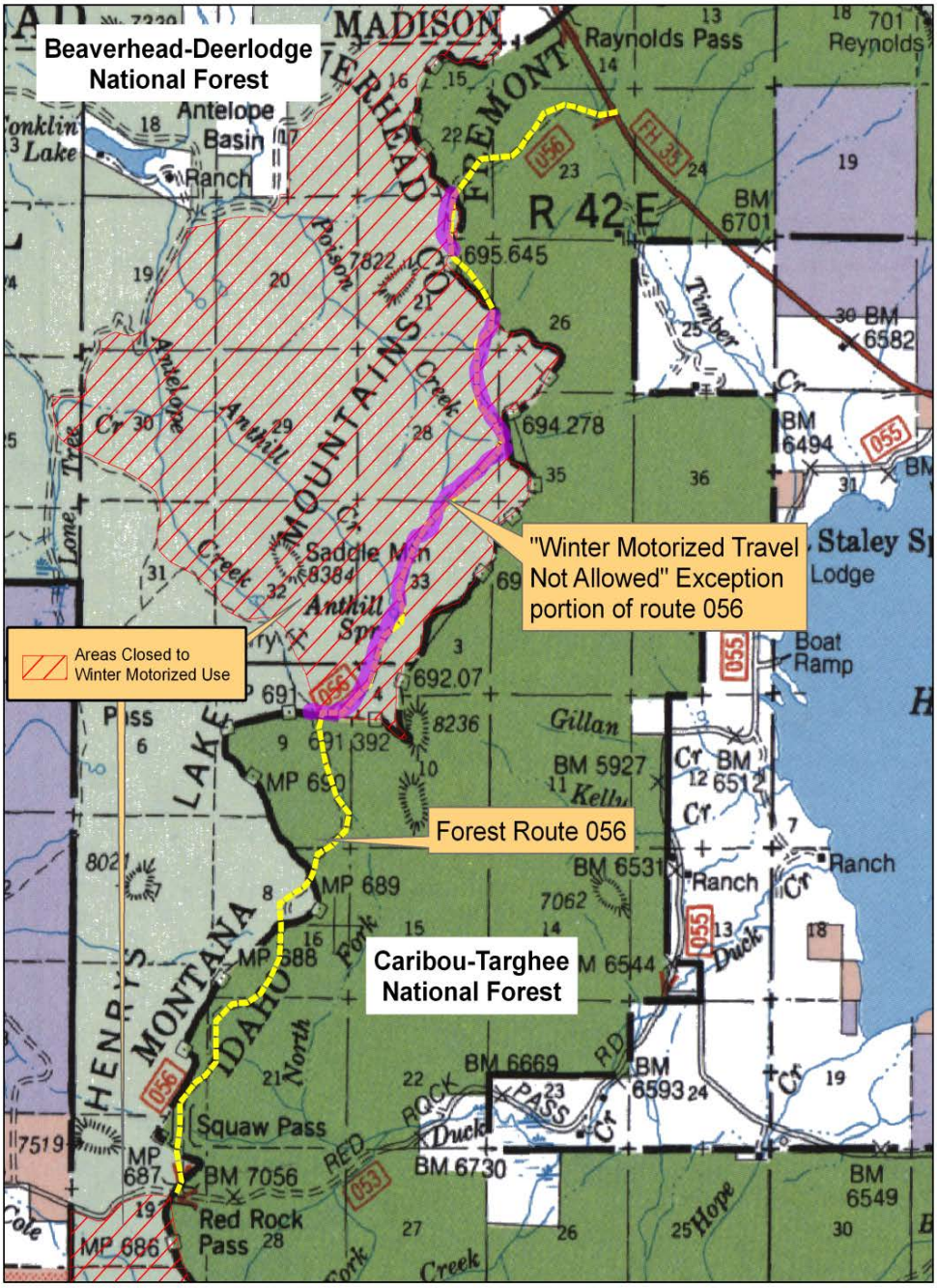

Figure 2. Map displaying location of Road #056 along Idaho/Montana border and portion of the road designated as a snowmobile route by the Revised Forest Plan. The road starts in Idaho on Forest Highway 35 (FH 35)[6]. It crosses both the Caribou-Targhee and Beaverhead-Deerlodge National Forests and terminates at Red Rock Pass on the State boundary.

[6] This highway is also referred to on some maps as Idaho Highway 87

Figure 3. A typical view of terrain and vegetation on the Antelope Basin route. Note there is no evidence of soil erosion or disturbance to vegetation from snowmobile use on, or adjacent to, Road #056.

Recreational users access the BDNF portion of Road #056 from FH 35 in Idaho, travel through an area open to snowmobiles on the Caribou-Targhee National Forest, through the winter, non-motorized area using Road #056 on the BDNF and back onto an open to motorized recreation area in Idaho or other areas in the Centennial Valley in Montana. The road has been a connector route continually open to winter motorized use since snowmobiling began in the area.

In this southeast corner of the Gravelly landscape and surrounding area, winter recreation use is primarily associated with the communities of West Yellowstone, Montana and Island Park, Idaho – popular snowmobile destinations. As a result, snowmobile use of the general Raynolds Pass, Red Rock Pass, Centennial Valley, Antelope Basin area is frequently associated with the West Yellowstone and Island Park areas. The most popular staging areas for snowmobile use are located at the end of plowed roads around Henrys Lake (Idaho). As a result, marked routes in the Henrys Lake/Red Rock Pass area receive relatively heavy snowmobile use compared to other areas on the BDNF (most of this area is not located on the BDNF).

In comparison, use of the Road #056 corridor is associated with residents of the upper Madison Valley (Montana) who park along FH 35 (less highway driving distance) or homeowners along FH 35 (Idaho). For these residents, Road #056 connects the same areas open for snowmobile use as the more popular staging areas around Henrys Lake.

Winter motorized use in the entire Antelope Basin MA was allowed prior to the Forest Plan Revision, as was motorized use of this road. The Corrected FEIS developed a range of alternatives which considered allocating or not allocating areas with important

motorized routes and analyzing those effects by landscape. Action alternatives allocated additional quiet, non-motorized opportunities, resulting in a reduction to motorized settings in the winter. Alternative 6 was designed to retain this motorized corridor in the Antelope Basin MA. The area was well suited to non-motorized allocations but an important snowmobile route passed through it (Corrected FEIS, pages 362 and 632). With the Forest Plan Revision, winter motorized acres were reduced 38%, within the Gravelly Landscape; from 377,935 acres under No Action to 234,607 acres in Alternative 6 (Corrected FEIS pg. 382).

Soil, Water, Vegetation & Other Resources

As disclosed in the Corrected FEIS (pg. 90), overall emissions from snowmobile use on the BDNF are unlikely to exceed National Ambient Air Quality or Montana Air Quality Standards since these standards have not been exceeded in the West Yellowstone area where snowmobile use is much heavier.. Please refer to the previous discussion in the Electric Peak section concerning water quality and snowmobile use in YNP. Snowmobile use on the Antelope Basin route is likely $1/10^{th}$ or less of the use that occurred between the West Entrance of YNP and Old Faithful in 2004. Use of this single route by some winter, motorized recreationists at vastly lower concentrations than occurring in YNP is unlikely to exceed the same air quality standards. “Nuisance” emissions (emissions which alter desirable, clean-smelling air) are localized (along the route) and temporary (while snowmobiles are operating in the road corridor).

The Corrected FEIS finds impacts from snowmobile use on the BDNF to soil and vegetation are benign since these resources are buffered by snow during snowmobile use and the tracks vanish with snow melt (Corrected FEIS, pg. 289). Snowmobile use along the Road #056 corridor near Antelope Basin also occurs when soil and vegetation are buffered by snow. In addition, the route is a system road open to highway vehicles all year (although it becomes impassable due to snow during the winter). Please refer to the above photo of this route (in the absence of snow). This road will be maintained as compacted soil without vegetation to accommodate wheeled travel by passenger vehicles. This road has been managed and maintained as a summer motorized and winter motorized road for many years. There is no evidence snowmobile use has damaged soil or vegetation on, or along, this route.

Please refer to the previous discussion for the Electric Peak route summarizing the results of research analyzing the effects of snowmobile emissions on water quality and aquatic systems in Yellowstone National Park (YNP). That research found no real aquatic biological or water quality risk related to emissions from snowmobile use in YNP. Therefore there would be no risk to those resources in headwater streams in the Antelope Basin MA from snowmobile use along the Road #056 corridor where snowmobile use occurs at vastly lower concentrations.

Water quality has not been an issue with snowmobile use on this road in the past. Road #056 is located on the Continental Divide; there is no nearby water other than a few small springs. About 0.2 miles of the 3.8 mile length of this road is within 300 feet of a stream. It is not within 300 feet of any stream segment occupied by WCT. This road location and the road design site-specifically mitigate impacts from passenger vehicle use (as well as snowmobile use) to water quality in Poison and Anthill Creeks. Snow, road design and use patterns are providing adequate protection.

Risks for water contamination are highest near concentrated use areas such as snowmobile staging areas or parking lots if they occur close to water (Corrected FEIS, pg. 137). However, for this particular route, people typically park off-forest along FH35. No water quality concerns resulting from winter recreation use at these parking areas along the highway have been identified. These sites serve as winter recreation access points for other areas on and off the BDNF, and their use would be expected to continue regardless of whether Road #056 is open to snowmobiles or not.

Wildlife and Wildlife Habitat

The Corrected FEIS specifically addressed how the selected alternative reduced snowmobile impacts to wildlife and wildlife habitat by closing areas to motorized winter recreation. Non-motorized winter allocations increased from the existing condition of 16% across the Forest to 40% (Corrected FEIS, pg. 39, Table 1). Also, forest-wide the percent of big game winter range closed to winter motorized use increased from 26% to 43% (Corrected FEIS, page 510, Table 176).

Snowmobile use along the Road #056 corridor in the Antelope Basin MA is in the Gravelly landscape where winter motorized allocations were reduced by over 143,000 acres, from 377,935 acres to 234,607 acres (Corrected FEIS, pg. 382). Specifically, in the Gravelly landscape the percent of big game winter range closed increased from 19% to 49% and the percent of wolverine denning habitat closed to snowmobiles increased from 25% to 79% (Corrected FEIS, pg. 510).

Concerning wildlife populations specific to snowmobile use along Road #056 corridor in the Antelope Basin MA; big game are minimally impacted as the route is not located in big game winter range (AR FSEIS-52). As such, there is little likelihood of any impact as big game species would not be present during snowmobile use periods. In terms of mountain goats, the location of the road is not in an area identified by MTFWP as an area of mountain goat distribution (AR FSEIS-53). The nearest populations are located in the Madison Range to the east and the Snowcrest Range to the west. Both populations occur in winter, non-motorized allocations. There is no big game winter range, because of elevation, along the entirety of Road #056.

The Rocky Mountain bighorn sheep has been added to the BDNF sensitive species list since the 2009 Forest Plan was approved. There are no bighorn sheep populations in the southern portion of the Gravelly Landscape nor adjacent to the route on the Idaho side of the Continental Divide. The nearest populations in Montana are located to the east in the Madison Range and northwest in the Greenhorn Mountains. A small population (Lionhead) in Idaho borders the Continental Divide southwest of Henry's Lake.

Gray wolves are being assessed as a sensitive species on the BDNF list since they were de-listed in 2011 (USFWS Final Rule, May 5, 2011). Sime et al (2011) shows a steady increase in the number of wolves in SW Montana in the face of current activities on public and private lands. The Toadflax & Snowshoe Packs are located north of the route and number nine and three wolves respectively. The Madison Pack, five wolves, inhabits the area east of the trail on the Gallatin National Forest. None of these packs appear to have been influenced by snowmobile activity and are all subject to hunting per MTFWP regulations. Snowmobile use has been occurring as long as the wolves have been in the area with no apparent impact on their expansion. Continued snowmobile use of this route will not cause a trend toward listing of the species.

Lynx management is consistent with the Northern Rockies Lynx Management direction despite the species being absent from the BDNF. There is no vegetation management whatsoever associated with snowmobile use of this road. As noted in the Electric Peak narrative, this road was also included in the environmental baseline for lynx effects in both the LCAS(2000) and the subsequent Northern Rockies Lynx Amendment (2007). The linkage zone identified in the Raynolds Pass area is approximately 2.0 miles north of the route and crosses the all season road FH 35. The linkage zone is unaffected by the snowmobile route. In compliance with the Lynx Amendment, no expansion of use has been authorized and the existing condition provides for lynx movement and maintains effectiveness of lynx habitat. The following table shows that little of the road is in lynx habitat.

Table 5. Antelope Basin Route # 056 LAU Habitat Analysis Components

Route #056 Components	Measure
LAU ID	#475
LAU Area	14,054 acres
LAU Open to Winter Motorized (1986 Plan)	14,054 acres
LAU Open to Winter Motorized (2009 Plan)	8,813 acres
LAU Winter Motorized Reduction	5,241 acres
LAU Acres of lynx Habitat	3,133 acres
Route Length in LAU	3.8 miles
Route Area in LAU	6.0 acres
Route Length in Lynx Habitat	0.5 miles
Route Area in Lynx Habitat	0.7 acres

Snowmobile use of this road is in compliance with R1 lynx management direction (AR FSEIS-56). The actual route area in lynx habitat is fundamentally inconsequential at 6.0 acres within a 14,054 acre area.

Refer to the previous discussion for Electric Peak concerning information from Copeland et al (2010) about wolverine denning habitat. Elevations on this route range from approximately 7380 to 7900 feet. There is no big game winter range along this route.

From elevation alone, the area traversed by the route is located at the lower elevation range for winter use. Despite the relatively level grade of the road, the Copeland persistent spring snow model shows virtually ½ the route as not showing persistent snow for the April 24 – May 15 period. This is consistent with deteriorating snow conditions as winter releases its hold on the landscape. Modeled denning habitat is located west of the southern end of the route in a winter non-motorized allocation. Winter motorized recreation is prohibited off the route.

Table 6. Miles of persistent spring snow cover on Antelope Basin Route #056

Antelope Basin Route #056	Measure
Spring Snow Cover 0 out of 7 Years	1.0 mi.
Spring Snow Cover 1 out of 7 Years	0.1 mi.
Spring Snow Cover 2 out of 7 Years	1.1 mi.
Spring Snow Cover 3 out of 7 Years	1.2 mi.
Spring Snow Cover 4 out of 7 Years	0.3 mi.
Total Route Length	3.8 miles

Copeland et al 2010, April 24 – May 15
Miles by Cover Category (None exceed 4 out of 7 years)

As noted in the lynx table, the Forest Plan increased non-motorized recreation acres by thousands of acres over the 1986 plan. Wolverines are also expected to benefit from the reductions in winter motorized use. The Antelope Basin route use will not lead towards a trend to listing the wolverine.

On October 4, 2010, the U.S. Fish and Wildlife Service issued a BO and Incidental Take Statement for Yellowstone Grizzly Bear Ecosystem grizzly bears (including those in the Gravelly landscape) for the 2009 Forest Plan. This BO considered all winter motorized and non-motorized use and allocations included in the Forest Plan.

The USFWS's BO on the Yellowstone Grizzly Bear Ecosystem portion of the Forest found little effect of snowmobiles on grizzly bears except for possible impact to females with cubs immediately after den emergence (AR FSEIS-49:31-33). The BO provides that the greatest probability of interactions at or near dens would be where potential denning habitat overlaps with open snowmobile areas and the influence zones around roads or routes.

Snowmobile use on the delineated route also would not alter vegetation characteristics of wildlife habitat in the area because the vegetation is buffered by the snow. In addition, the use of the road does not impact riparian areas or species associated with riparian areas as use is restricted to the footprint of the existing road and use is during the winter when it has negligible impact.

The route does provide snowmobile access from FH 35 at Raynolds Pass southward across portions of the Beaverhead-Deerlodge and Caribou-Targhee National Forests toward Red Rock Pass. However, as discussed above, the most popular access originates in the Henry's Lake area. BDNF wolverine denning habitat is modeled in the Centennial Recommended Wilderness Management Area (closed to winter motorized uses) which is in the Gravelly Landscape south of Red Rock Pass.

The Gravelly Landscape contains 15,282 acres of modeled wolverine denning habitat with 12,232 acres (79%) closed to winter motorized activity, (Corrected FEIS, pg. Revised BE 99, Table 14). For the entirety of southwest Montana and southeast Idaho Inman et. al. (2007) estimates a total range of 1-20 potential female wolverine territories (Corrected FEIS, pg. Revised BE 98, Figure 45) across this vast area which includes the Gravelly Landscape and the Centennial Range. Densities of this species are very low with no guarantee wolverines will use the habitat along the Montana-Idaho border in any given winter.

The 3.8 miles of the Antelope Basin route pale in comparison to the 950 miles of groomed trails promoted by Island Park and touted as "one of the best groomed snowmobile trail systems in the world." http://www.islandparksnowmobilingvacation.com/index.html. The Island Park Trail System Map (AR FSEIS-59) clearly emphasizes trail development east of FH 35 and the community of Island Park. The infrastructure for food, lodging, fuel, and trail maintenance is not matched by the Road #056 Trailhead where there is no development other than a small plowed area for unloading snowmobiles.

Road #056 provides no direct access to wolverine habitat. The high elevation wolverine denning habitat along the Montana/Idaho border is several miles south of Red Rock Pass. Use is inconsequential compared to activity on the Idaho side with the locus of

snowmobile activity around Island Park, Idaho. Continued use of the Road #056 will not cause a trend toward listing the wolverine.

2009 and 2010 monitoring of other areas with similar use on the BDNF indicate winter motorized use to be low or non-existent, depending on the area (AR FSEIS-106 and 108). The Forest is not aware of, and public comments did not identify any actual problems with off route use in this area since the Plan reallocated the area from a winter motorized to winter non-motorized setting in 2009. Should snowmobiles leave (illegally) Road #056 on the BDNF, risks of wildlife harassment are low. The adjacent area is not big game winter range and does not include crucial habitat for grizzly bears or wolverines.

Off-Road Vehicle Use and Other Existing or Proposed Recreation Uses

The Revised Forest Plan (Alternative 6 Modified) reallocated the lands on either side of Road #056 from a winter motorized setting to what is now a winter non-motorized setting. The road itself remained as it has been for decades; winter snowmobile use is permissible, and highway vehicles may use it throughout the year (when snow does not render it impassible).

There are no reported conflicts between winter uses on Road #056. There are no recorded public safety issues, accidents, or injuries associated with winter motorized use of Road #056. There are no new proposed non-motorized routes near Road #056.

Many non-motorized, winter recreationists prefer opportunities to ski or snowshoe in the absence of motorized winter use (snowmobiles). In the Antelope Basin MA, skiing and snowshoeing opportunities in the absence of snowmobile use is available on about 5,500 acres. The 3.8 miles of snowmobile route occurs along the east edge of this non-motorized area adjacent to open areas in Idaho. Since snow packed down by snowmobiles on the trail makes travel on skis or snowshoes easier, some non-motorized users may choose to use the trail to access the area closed to snowmobile use. Conversely, some non-motorized users will avoid the trail to distance themselves from the sight and sound of motorized users.

While a few skiers take multi-day trips and winter camp, most skiers are limited to about 10 miles per day so use generally occurs in relative close proximity to plowed roads and parking areas (Corrected FEIS, pg. 352). FH 35 is about 1.5 miles from the BDNF boundary.

Some recreation users seek a sense of solitude and remoteness away from the sight and sound of people and machines. Other recreation users do not. Snowmobile use on Road #056 would disrupt a sense of solitude for those seeking a quiet experience when both types of users are in the same area at the same time. Since Road #056 is on the eastern edge of the non-motorized management area, the area affected by noise from the route is also on the eastern edge of the management area. The distance this noise can be heard from the route is variable and depends on the type and number of snowmobiles using the route and air density. Noise is absorbed relatively quickly by the presence of deep snow, wind direction, and broken terrain. Depending on the day, snowmobile noise may be muted within hundreds of yards or be perceptible several miles away.

Effects of this noise on individual users within earshot is highly subjective and, therefore, variable. That is, it largely depends on the expectations of the non-motorized user when

they chose this area to ski or snowshoe. The Forest Plan intentionally and explicitly displays the size, location, and configuration of the motorized and non-motorized allocations so users can find locations to meet their various recreational pursuits and expectations. Those maps are displayed in the Forest Plan on pages 54 and 55, in addition to similar maps posted on the web so people may zoom in for greater detail. "Management area direction describing recreation settings will help Forest visitors to accurately anticipate the experience they will have when visiting a particular location" (2009 ROD pg. 14 and 15).

2009 and 2010 monitoring of other areas with similar use on the BDNF indicate winter motorized use to be low or non-existent, depending on the area (AR FSEIS-106 and 108). The Forest is not aware of, and public comments did not identify any actual problems with off route use in this area since the Plan reallocated the area from a winter motorized to winter non-motorized setting in 2009. If it occurs, the greatest potential adverse effect in this particular area would be on the non-motorized user's recreational experience whose expectation should be to not encounter snowmobiles off of Road #056. Now that the area has been closed to snowmobile use, mechanisms are in place to address illegal use should it occur, including enforceable prohibitions.

All 3.8 miles of snowmobile use on the Road #056 coincides with the CDNST. The CDNST was designated by Congress in 1978 as a unit of the National Trails System. The 3,100 mile CDNST traverses the Continental Divide between Mexico and Canada. Approximately 180 miles of the trail are designated on the BDNF. The basic goal of the trail is to provide the hiker and rider an entree to the diverse country along the Continental Divide in a manner, which will assure a high quality recreation experience while maintaining a constant respect for the natural environment.

The Forest Plan (pg. 34) directs the CDNST be managed according to the National Trails Act, the CDNST Study Reports and the CDNST Comprehensive Plan, for the purpose of providing a continuous appealing trail route, designed for the hiker and horseman, but compatible with other land uses.

The National Trail Act (1968)[7] intended that National Scenic Trails be established primarily for hiking and horseback use. Generally motorized vehicular use is prohibited by the National Trails System Act. However, the 1978 amendment specifically provided for limited motorized use. Specifically, the use of motorized vehicles which will not substantially interfere with the nature and purposes of the CDNST, and which, at the time of designation, were allowed shall be permitted.

The CDNST 1976 Study Report describes the purposes of the CDNST as providing a continuous, appealing trail route, designed for the hiker and horseman, but compatible with other land uses.

The CDNST Comprehensive Plan (2009) provides direction to manage the CDNST to provide high-quality scenic, primitive hiking and pack and saddle stock opportunities. Backpacking, nature walking, day hiking, horseback riding, nature photography, mountain climbing, cross-country skiing, and snowshoeing are compatible with the nature and purposes of the CDNST.

[7] P.L. 90-543, as amended through P.L. 111-11, March 30, 2009; *United States Code*, Volume 16, Sections 1241-1251

Forest Service direction for the CDNST is found in Forest Service Manual, Section 2353.4. Motor vehicle use by the general public is generally prohibited on the CDNST. The exceptions are when the motor vehicle route crosses the CDNST, and does not substantially interfere with the nature and purposes of the CDNST; or when the use was allowed prior to November 10, 1978, and will not substantially interfere with the nature and purposes of the CDNST.

Over-snow motorized use is allowed when the use will not substantially interfere with the nature and purposes of the CDNST. Use on the CDNST is concentrated in the summer months of June, July, August, and September. The minimal winter use that occurs along the trail tends to be localized; cross-country skiing and snowshoeing occur in timbered areas at lower elevations and adjacent to developed recreation areas.

The Antelope Basin MA exception to the winter motorized travel not allowed restriction is on Road #056. There is 3.8 miles of the CDNST that is coincident to the delineated snowmobile route. Since the winter motorized exception is on an existing system road where there is minimal cross country skiing and snowshoeing, there is no substantial interference with the nature and purposes of the CDNST. The designated CDNST is coincident with Road #056. Motorized use is permitted on the CDNST when that use is consistent with the applicable land management plan, was allowed prior to November 10, 1978, and will not substantially interfere with the nature and purposes of the CDNST. Because this is not a high standard road, there are no plans to relocate or construct a new CDNST route off of the road. Snowmobile use does not interfere with summer hiking and pack and saddle stock opportunities.

Antone Cabin (Road 325)

Table 7. Motorized Use Status Before and After Forest Plan Revision

Route	Before Revision	After Revision
Road 325 – Snowmobiles	Open	Open
Area around Road 325 – Snowmobiles	Open	Closed
Road 325 – Summer wheeled motorized	Open (including highway vehicle)	Open (including highway vehicle)

Page 152 of the Forest Plan displays a map of the Snowcrest Mountain Recommended Wilderness MA located in the Gravelly landscape southwest of Ennis and east of Dillon, Montana. Motorized travel is not allowed in the MA (see Snowcrest Mountain Recommended Wilderness MA map in Appendix B). The yellow line traveling northeast in the southwest corner of the MA to Antone Cabin is an exception to the motorized travel not allowed restriction. A Forest Plan Standard specific to the Snowcrest Mountain Recommended Wilderness MA maintained the road to Antone Cabin (Road #325) as open to motorized vehicles (including highway vehicles) yearlong (Forest Plan, pg. 153). Road #325 is 4.5 miles in length and accesses the Antone Cabin, available for public rental July 1 through April 1.

Further travel planning completed under 36 CFR 212 for the Madison Ranger District resulted in the October 14, 2011 publication of a Motor Vehicle Use Map (MVUM) for the Gravelly Mountain Range. The MVUM designates Road #325 (Antone) as open to highway vehicles July 1 through March 31. Road #325 is not plowed. When snow makes the road impassable to highway vehicles, it is available for snowmobile use.

The 4.5 mile Antone Road is open to motorized uses in the winter to provide access to the Antone Recreation Rental Cabin. Winter motorized use of the area has always been low, due to limited access and distance from a plowed parking area. Winter motorized use in the basin surrounding the Antone Cabin was allowed prior to the Forest Plan, as was use of this road.

Figure 4. No evidence of soil erosion or vegetative disturbance from snowmobile use on Antone Cabin Road #0325.

The Corrected FEIS developed a range of alternatives which considered allocating, or not allocating, areas with important motorized use and the analysis of those effects by landscape. Action alternatives allocated additional quiet, non-motorized opportunities and a reduction to motorized settings in the winter. Alternative 6 was designed to retain a motorized corridor in the Snowcrest Mountain Recommended Wilderness MA to allow continued motorized access to the Antone Cabin. Within the Gravelly Landscape winter motorized acres were reduced 38%, from 377,935 acres under No Action, to 234,607 acres in Alternative 6 (Corrected FEIS pg. 382).

Soil, Water, Vegetation & Other Resources

As disclosed in the Corrected FEIS (pg. 90), overall emissions from snowmobile use on the BDNF are unlikely to exceed National Ambient Air Quality or Montana Air Quality Standards since these standards have not been exceeded in the West Yellowstone area where snowmobile use is much heavier. Please refer to the previous discussion in the Electric Peak section concerning water quality and snowmobile use in YNP. Snowmobile use on the Antone Cabin route is $1/10^{th}$ or less of the use that occurred between the West

Entrance of YNP and Old Faithful in 2004. Use of this single route by some winter, motorized recreationists at vastly lower concentrations than occurs in YNP is unlikely to exceed the same air quality standards. "Nuisance" emissions (emissions which alter desirable, clean-smelling air) are localized (along the route) and temporary (while snowmobiles are operating on the road).

The Corrected FEIS found benign impacts from snowmobile use on the BDNF to soil and vegetation since these resources are buffered by snow during snowmobile use and the tracks vanish with snow melt (Corrected FEIS, pg. 289). Snowmobile use on the road to Antone Cabin also takes place when soil and vegetation are buffered by snow. In addition, the route is a system road open to highway vehicles July 1 through March 31 (although it becomes impassable due to snow during the winter). Please refer to Figure 4 above. This road will be maintained as compacted soil without vegetation to accommodate wheeled travel by passenger vehicles. This road has been managed and maintained as a summer motorized and winter motorized road for decades. There is no evidence snowmobile use has damaged soil or vegetation on, or along, this route.

Please refer to the previous discussion for the Electric Peak route summarizing the results of research analyzing the effects of snowmobile emissions on water quality and aquatic systems in YNP. That research found no real aquatic biological or water quality risk related to emissions from snowmobile use in YNP. Therefore there would be no risk to those resources along the East Fork of Blacktail Deer Creek from snowmobile use on the road to Antone Cabin where snowmobile use occurs at vastly less concentrations.

Water quality has not been an issue with snowmobile use on this road in the past. About 2.0 miles of this route is within 300 feet of a perennial stream. It is not within 300 feet of any stream segment occupied by WCT. Road #325 crosses the South Fork of Blacktail Deer Creek and tributaries with a bridge and culverts; snow, road design, and use patterns are providing adequate protection.

Risks for water contamination are highest near concentrated use areas such as snowmobile staging areas or parking lots if they occur close to water (Corrected FEIS, pg. 137). However, for this particular route, parking typically occurs about 15 miles away where Beaverhead County plows snow on the Blacktail Road to Prices Canyon and the South Centennial Valley Road to the Red Rock Wildlife Refuge at Lakeview, Montana. Both roads are county roads. No water quality concerns resulting from winter recreation parking at these areas have been identified. These sites serve as winter recreation access points for other areas on and off the BDNF, and their use would be expected to continue regardless of whether Road #325 is open for snowmobile access to Antone Cabin or not.

Wildlife and Wildlife Habitat

The Corrected FEIS specifically addressed how the selected alternative reduced snowmobile impacts to wildlife and wildlife habitat by closing areas to motorized winter recreation. Non-motorized winter allocations increased from the existing condition of 16% across the Forest to 40% (Corrected FEIS, pg. 39). Also, forest-wide the percent of big game winter range closed to motorized use increased from 26% to 43% (Corrected FEIS, pg. 510, Table 176).

Snowmobile use on the Antone Cabin Road occurs in the Gravelly landscape where winter motorized acres were reduced from 377,935 acres to 234,607 acres (Corrected

FEIS, pg. 382). Specifically, in the Gravelly landscape the percent of big game winter range closed, increased from 19% to 49% and the percent of wolverine denning habitat closed to snowmobiles increased from 25% to 79% (Corrected FEIS, pg. 510).

Concerning wildlife populations specific to snowmobile use on the Antone Cabin Road, big game are minimally impacted as the route is not located in big game winter range (AR FSEIS-87). As such, there is little likelihood of any impact as big game species would not be present during snowmobile use periods.

MTFWP mountain goat distribution maps show some overlap with the Antone Cabin route. Mountain goats have *not* been observed along the road but at higher elevations on Antone Peak approximately 2 miles east of the road terminus; the south facing slopes of Sawtooth Peak approximately 1.5 miles north of the route; and 6 miles further north at Sunset Peak. All of these areas are closed to winter motorized use by the Forest Plan.

Rocky Mountain bighorn sheep has been added to the BDNF's sensitive species list since the Forest Plan was approved. There are no bighorn sheep populations anywhere in the southern portion of the Gravelly Landscape nor adjacent to the Antone Cabin route. The nearest population is found to the northeast in the Greenhorn Mountains. Continued snowmobile use of this route will have no impact on the bighorns. This recreational use will not cause a trend towards listing the species.

Gray wolves have been on the sensitive species list since the initial classification as non-essential/experimental. Sime et. al. (2011) shows a steady increase in the number of wolves in SW Montana in the face of current activities on public and private lands. The Price Creek pack is new with 5 wolves, and MTFWP (2012) shows this pack just west of the trail off of National Forest System lands. As with other wolf packs, Price Creek represents an expansion of wolf activity in the face of multiple human activities across private, State, and Federal ownerships. There is no apparent influence from snowmobile activity and these wolves are also subject to hunting per MTFWP regulations. Snowmobile use has been occurring as long as the wolves have been in the area with no apparent impact on their expansion. Continued snowmobile use on this route will not cause a trend toward listing of the species

Despite the absence of lynx on the BDNF, a consideration of the lynx management direction was completed for specific impacts of the Antone Cabin route to lynx. The review confirms snowmobile use of the route is consistent with lynx management direction. The route and surrounding area were part of the environmental baseline for the Lynx Conservation Assessment and Strategy (2000) and the subsequent Northern Rockies Lynx Amendment (2007).

There is no vegetation management whatsoever associated with snowmobile use of this road. As noted in both the Electric Peak and Antelope Basin discussions, this road was also included in the environmental baseline for lynx effects in both the LCAS(2000) and the subsequent Northern Rockies Lynx Amendment (2007). There are no linkage zones shown for any portion of the southwest Gravelly Landscape. The following table shows that little of the road is in lynx habitat.

Table 8. Antone Cabin Road #325 LAU Habitat Analysis Components

Antone Cabin Road #325 Components	Measure
LAU ID	# 460
LAU Area	8,844 acres
LAU Open to Winter Motorized (1986 Plan)	8,392 acres
LAU Open to Winter Motorized (2009 Plan)	0 acres
LAU Winter Motorized Reduction	8,392 acres
LAU Acres of lynx Habitat	5,598 acres
Route Length in LAU	4 5 miles
Route Area in LAU	9.0 acres
Route Length in Lynx Habitat	0.3 miles
Route Area in Lynx Habitat	0.6 acres

In compliance with the Lynx Amendment, no expansion of use has been authorized and the existing condition provides for lynx movement and maintains effectiveness of lynx habitat.

With no lynx present on the BDNF, no change in habitat and no linkage zones in the area, snowmobile use of this road complies with R1 direction on considering effects to lynx. The actual route area in lynx habitat is fundamentally inconsequential at 0.6 acres within an 8,844 acre area. Lynx management is consistent with the Northern Rockies Lynx Management direction despite the species being absent from the BDNF (AR FSEIS-57).

As noted in the previous discussion for Electric Peak concerning elevation preferences from Copeland et al (2010) about wolverine denning habitat, the species selects for higher elevation above 7800 feet. The elevation of this route ranges from approximately 7,400 to 8,164 ft. The Copeland persistent spring snow model shows virtually no persistence in the area for the April 24 – May 15 period. Despite its elevation, the road's topographic aspect is primarily south/southwest for the first 3+ miles. These warmer exposures promote snowmelt and deteriorating snow conditions as winter releases its hold on the landscape. Shaded areas near the top of the route can retain snow banks for longer periods. There is no big game winter range along this route.

From elevation alone, the area traversed by the route is located at the lower elevation range for winter use. There is no modeled denning habitat along the route, and winter motorized recreation is now prohibited in areas bordering the route.

Table 9. Miles of persistent spring snow cover on Antone Cabin Road #325

Antone Cabin Road #0325	Measure
Spring Snow Cover 0 out of 7 Years	4.2 mi.
Spring Snow Cover 1 out of 7 Years	0.3 mi.
Spring Snow Cover 2 out of 7 Years	0 mi.
Spring Snow Cover 3 out of 7 Years	0 mi.
Spring Snow Cover 4 out of 7 Years	0 mi.
Total Route Length (Miles)	4.5 miles

Copeland et al 2010, April 24 – May 15
Miles by Cover Category (None exceed 4 out of 7 years)

As noted in the lynx table, the Forest Plan increased non-motorized recreation acres by thousands of acres over the 1986 plan. Wolverines are also expected to benefit from the reductions in winter motorized use. Snowmobile use on the Antone Cabin Road will not lead towards a trend to listing the wolverine.

On October 4, 2010, the U.S. Fish and Wildlife Service (USFWS) issued a Biological Opinion (BO) and Incidental Take Statement for Yellowstone Grizzly Bear Ecosystem grizzly bears (including those in the Gravelly landscape) for the 2009 Forest Plan. This BO considered all winter motorized and non-motorized use and allocations included in the Forest Plan.

The BO on the Yellowstone Grizzly Bear Ecosystem portion of the Forest found little effect of snowmobiles on grizzly bears except for possible impact to females with cubs immediately after den emergence (AR FSEIS-49:31-33). The BO provides that the greatest probability of interactions at or near dens would be where potential denning habitat overlaps with open snowmobile areas and the influence zones around roads or routes.

Snowmobile use on the delineated route also would not alter vegetation characteristics of wildlife habitat in the area because the vegetation is buffered by the snow. In addition, the use of the route does not impact riparian areas or species associated with riparian areas as use is restricted to the footprint of the existing road and use is during the winter when it has negligible impact.

2009 and 2010 monitoring of other areas with similar use on the BDNF indicate winter motorized use to be low or non-existent, depending on the area (AR FSEIS-106 and 108). The Forest is not aware of, and public comments did not identify, any actual problems with off route use in this area since the Plan reallocated the area from a winter motorized to winter non-motorized setting in 2009. Should snowmobiles leave (illegally) Road #325, risks of wildlife harassment are low. The adjacent area is not big game winter range and does not include crucial habitat for grizzly bears or wolverines.

Off-Road Vehicle Use and Other Existing or Proposed Recreation Uses

The Revised Forest Plan (Alternative 6 Modified) reallocated the lands on either side of Road #325 from a winter motorized setting to what is now a winter non-motorized setting. The road itself remained as it has been for decades; winter snowmobile use is permissible, and highway vehicles may use it throughout the year (when snow does not render it impassible).

There are no reported conflicts between winter uses on Road #056. There are no recorded public safety issues, accidents, or injuries associated with winter motorized use of Road #325.

Many non-motorized, winter recreationists prefer opportunities to ski or snowshoe in the absence of motorized winter use (snowmobiles). In the Snowcrest Mountain Recommended Wilderness MA, skiing and snowshoeing opportunities in the absence of snowmobile use is available on nearly 92,000 acres. The 4.5 miles of snowmobile road occurs only in the southwest corner of this non-motorized area. Since snow packed down by snowmobiles on the trail makes travel on skis or snowshoes easier, some non-motorized users may choose to use the trail to access the area closed to snowmobile use. Conversely, some non-motorized users will avoid the trail to distance themselves from the sight and sound of motorized users.

While a few skiers take multi-day trips and winter camp, most skiers are limited to about 10 miles per day so use generally occurs in relative close proximity to plowed roads and

parking areas (Corrected FEIS, pg. 352). Plowed roads are located more than 15 miles from the Antone Cabin road. Due to this distance nearly all skiers would likely travel to Antone Cabin (available for public rental) using a snowmobile and ski the surrounding large area in the absence of winter, motorized use.

Snowmobiling in the area has occurred for many years. Within the Gravelly Landscape, winter motorized acres were reduced by 38 percent with Alternative 6 Modified, from 377,935 acres open to motorized winter use to 234,607 acres (Corrected FEIS pg. 382). Within the Snowcrest Inventoried Roadless Area (IRA). Prior to Forest Plan Revision, 59% of the IRA was allocated to a winter motorized setting on, while after revision (Alternative 6 Modified) allocated 1 percent to motorized use (Corrected FEIS, Appendix C, pg. C-145).

Some recreation users seek a sense of solitude and remoteness away from the sight and sound of people and machines. Other recreation users do not. Snowmobile use on Road #325 would disrupt a sense of solitude for those seeking a quiet experience when both types of users are in the same area at the same time. Road #325 stays within one defined basin; the area affected by noise from the route is also contained within this basin (the vast majority of this large non-motorized allocation would be unaffected by noise from motorized use of this road). The distance this noise can be heard from the route is variable and depends on the type and number of snowmobiles using the route and air density. Noise is also absorbed relatively quickly by the presence of deep snow and affected by wind direction and terrain. Depending on the day, snowmobile noise may be muted within hundreds of yards or be perceptible several miles away (in this case, ridge to ridge).

Effects of this noise on individual users within earshot is highly subjective and, therefore, variable. That is, it largely depends on the expectations of the non-motorized user when they chose this area to ski or snowshoe. The Forest Plan intentionally and explicitly displays the size, location, and configuration of the motorized and non-motorized allocations so users can find locations to meet their various recreational pursuits and expectations. Those maps are displayed in the Forest Plan on pages 54 and 55, in addition to similar maps posted on the web so people may zoom in for greater detail. "Management area direction describing recreation settings will help Forest visitors to accurately anticipate the experience they will have when visiting a particular location," (2009 ROD pg. 14 and 15). As noted above, most non-motorized winter use in the upper basin (around the cabin) is by cabin renters who snowmobile in and then ski from the cabin. Similarly, most of the snowmobile use to the cabin is by the same people.

2009 and 2010 monitoring of other areas with similar use on the BDNF indicate winter motorized use to be low or non-existent, depending on the area (AR FSEIS-106 and 108). The Forest is not aware of, and public comments did not identify any actual problems with off route use in this area since the Plan reallocated the area from a winter motorized to winter non-motorized setting in 2009. If it occurs, the greatest potential adverse effect in this particular area would be on the non-motorized user's recreational experience whose expectation should be to not encounter snowmobiles off of Road 325. Now that the area has been closed to snowmobile use, mechanisms are in place to address illegal use should it occur, including enforceable prohibitions.

The route is not part of the CDNST. (AR FSEIS-89).

Summary

This section only summarizes EO 11644 minimization criteria applied to the specified snowmobile routes. Readers are referred to more detailed descriptions of the individual routes on previous pages. These routes total 13.5 miles in length.

Snowmobile use in the Electric Peak area near Thunderbolt Creek and Cottonwood Lake, along the Road #056 corridor in Antelope Basin and on the road to Antone Cabin will not exceed air quality standards. Nuisance emissions are localized and temporary. Impacts to soil and vegetation are buffered by snow. In addition, Road #056 and the road to Antone Cabin are open to highway vehicles. Degraded water quality from human waste and petroleum products is unlikely since areas of concentrated use are not located along the specified routes. Use of the routes by snowmobiles does not alter wildlife habitat and potential wildlife disturbance is limited. Since snowmobile use is restricted to the specified routes, conflicts with recreationists using the adjacent winter, non-motorized areas are limited. In addition, use of these routes by most cross country skiers and people on snowshoes is limited by distance from plowed parking areas.

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Heinemeyer et al 2001. Aerial Surveys for Wolverine Presence and Potential Winter Recreation Impacts to Predicted Wolverine Denning Habitats in the Southwestern Yellowstone Ecosystem-*Figure 2. Predicted Wolverine Denning and Survey Habitats in the East Centennial Mountains, Gravelly Mountains, and Targhee Creek Sampling Units.*

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APPENDIX A

Final SEIS For the

Beaverhead-Deerlodge National Forest Land

and Resource

Management Plan to

Comply with District of Montana Court Order

Executive Order 11644

EXECUTIVE ORDER 11644 - USE OF OFF-ROAD VEHICLES ON THE PUBLIC LANDS

Source: The provisions of Executive Order 11644 of Feb. 8, 1972, appear at 37 FR 2877, 3 CFR, 1971-1975 Comp., p. 666, unless otherwise noted.

An estimated 5 million off-road recreational vehicles--motorcycles, minibikes, trial bikes, snowmobiles, dune-buggies, all-terrain vehicles, and others--are in use in the United States today, and their popularity continues to increase rapidly. The widespread use of such vehicles on the public lands-- often for legitimate purposes but also in frequent conflict with wise land and resource management practices, environmental values, and other types of recreational activity--has demonstrated the need for a unified Federal policy toward the use of such vehicles on the public lands.

NOW, THEREFORE, by virtue of the authority vested in me as President of the United States by the Constitution of the United States and in furtherance of the purpose and policy of the National Environmental Policy Act of 1969 (42 U.S.C. 4321), it is hereby ordered as follows:

Sec. 1. *Purpose.* It is the purpose of this order to establish policies and provide for procedures that will ensure that the use of off-road vehicles on public lands will be controlled and directed so as to protect the resources of those lands, to promote the safety of all users of those lands, and to minimize conflicts among the various uses of those lands.

Sec. 2. *Definitions.* As used in this order, the term:

(1) "public lands" means (A) all lands under the custody and control of the Secretary of the Interior and the Secretary of Agriculture, except Indian lands, (B) lands under the custody and control of the Tennessee Valley Authority that are situated in western Kentucky and Tennessee and are designated as "Land Between the Lakes," and (C) lands under the custody and control of the Secretary of Defense;

(2) "respective agency head" means the Secretary of the Interior, the Secretary of Defense, the Secretary of Agriculture, and the Board of Directors of the Tennessee Valley Authority, with respect to public lands under the custody and control of each;

(3) "off-road vehicle" means any motorized vehicle designed for or capable of cross-country travel on or immediately over land, water, sand, snow, ice, marsh, swampland, or other natural terrain; except that such term excludes (A) any registered motorboat, (B) any fire, military, emergency or law enforcement vehicle when used for emergency purposes, and any combat or combat support vehicle when used for national defense purposes, and (C) any vehicle whose use is expressly authorized by the respective agency head under a permit, lease, license, or contract; and

(4) "official use" means use by an employee, agent, or designated representative of the Federal Government or one of its contractors in the course of his employment, agency, or representation. [Sec. 2 amended by Executive Order 11989 of May 24, 1977, 42 FR 26959, 3 CFR, 1977 Comp., p. 120]

Sec. 3. *Zones of Use.* (a) Each respective agency head shall develop and issue regulations and administrative instructions, within six months of the date of this order, to provide for administrative designation of the specific areas and trails on public lands on which the use of off-road vehicles may be permitted, and areas in which the use of off-road vehicles may not be permitted, and set a date by which such designation of all public lands shall be completed. Those regulations shall direct that the designation of such areas and trails will be based upon the protection of the resources of the public lands, promotion of the safety of all users of those lands, and minimization of conflicts among the various uses of those lands. The regulations shall further require that the designation of such areas and trails shall be in accordance with the following—

(1) Areas and trails shall be located to minimize damage to soil, watershed, vegetation, or other resources of the public lands.

(2) Areas and trails shall be located to minimize harassment of wildlife or significant disruption of wildlife habitats.

(3) Areas and trails shall be located to minimize conflicts between off-road vehicle use and other existing or proposed recreational uses of the same or neighboring public lands, and to ensure the compatibility of such uses with existing conditions in populated areas, taking into account noise and other factors.

(4) Areas and trails shall not be located in officially designated Wilderness Areas or Primitive Areas. Areas and trails shall be located in areas of the National Park system, Natural Areas, or National Wildlife Refuges and Game Ranges only if the respective agency head determines that off-road vehicle use in such locations will not adversely affect their natural, aesthetic, or scenic values.

(b) The respective agency head shall ensure adequate opportunity for public participation in the promulgation of such regulations and in the designation of areas and trails under this section.

(c) The limitations on off-road vehicle use imposed under this section shall not apply to official use.

Sec. 4. *Operating Conditions.* Each respective agency head shall develop and publish, within one year of the date of this order, regulations prescribing operating conditions for off-road vehicles on the public lands. These regulations shall be directed at protecting resource values, preserving public health, safety, and welfare, and minimizing use conflicts.

Sec. 5. *Public Information.* The respective agency head shall ensure that areas and trails where off- road vehicle use is permitted are well marked and shall provide for the publication and distribution of information, including maps, describing such areas and trails and explaining the conditions on vehicle use. He shall seek cooperation of relevant State agencies in the dissemination of this information.

Sec. 6. *Enforcement.* The respective agency head shall, where authorized by law, prescribe appropriate penalties for violation of regulations adopted pursuant to this order, and shall establish procedures for the enforcement of those regulations. To the extent permitted by law, he may enter into agreements with State or local governmental agencies for cooperative enforcement of laws and regulations relating to off-road vehicle use.

Sec. 7. *Consultation.* Before issuing the regulations or administrative instructions required by this order or designating areas or trails as required by this order and those regulations and administrative instructions, the Secretary of the Interior shall, as appropriate, consult with the Secretary of Energy and the Nuclear Regulatory Commission.

[Sec. 7 amended by Executive Order 12608 of Sept. 9, 1987, 52 FR 34617, 3 CFR, 1987 Comp., p. 245]

Sec. 8. *Monitoring of Effects and Review.* (a) The respective agency head shall monitor the effects of the use of off-road vehicles on lands under their jurisdictions. On the basis of the information gathered, they shall from time to time amend or rescind designations of areas or other actions taken pursuant to this order as necessary to further the policy of this order. (b) The Council on Environmental Quality shall maintain a continuing review of the implementation of this order.

Sec. 9. *Special Protection of the Public Lands.* (a) Notwithstanding the provisions of Section 3 of this Order, the respective agency head shall, whenever he determines that the use of off-road vehicles will cause or is causing considerable adverse effects on the soil, vegetation, wildlife, wildlife habitat or cultural or historic resources of particular areas or trails of the public lands, immediately close such areas or trails to the type of off-road vehicle causing such effects, until such time as he determines that such adverse effects have been eliminated and that measures have been implemented to prevent future recurrence.

(b) Each respective agency head is authorized to adopt the policy that portions of the public lands within his jurisdiction shall be closed to use by off-road vehicles except those areas or trails which are suitable and specifically designated as open to such use pursuant to Section 3 of this Order.

[Sec. 9 added by Executive Order 11989 of May 24, 1977, 42 FR 26959, 3 CFR, 1977 Comp., p. 120]

APPENDIX B

Final SEIS For the

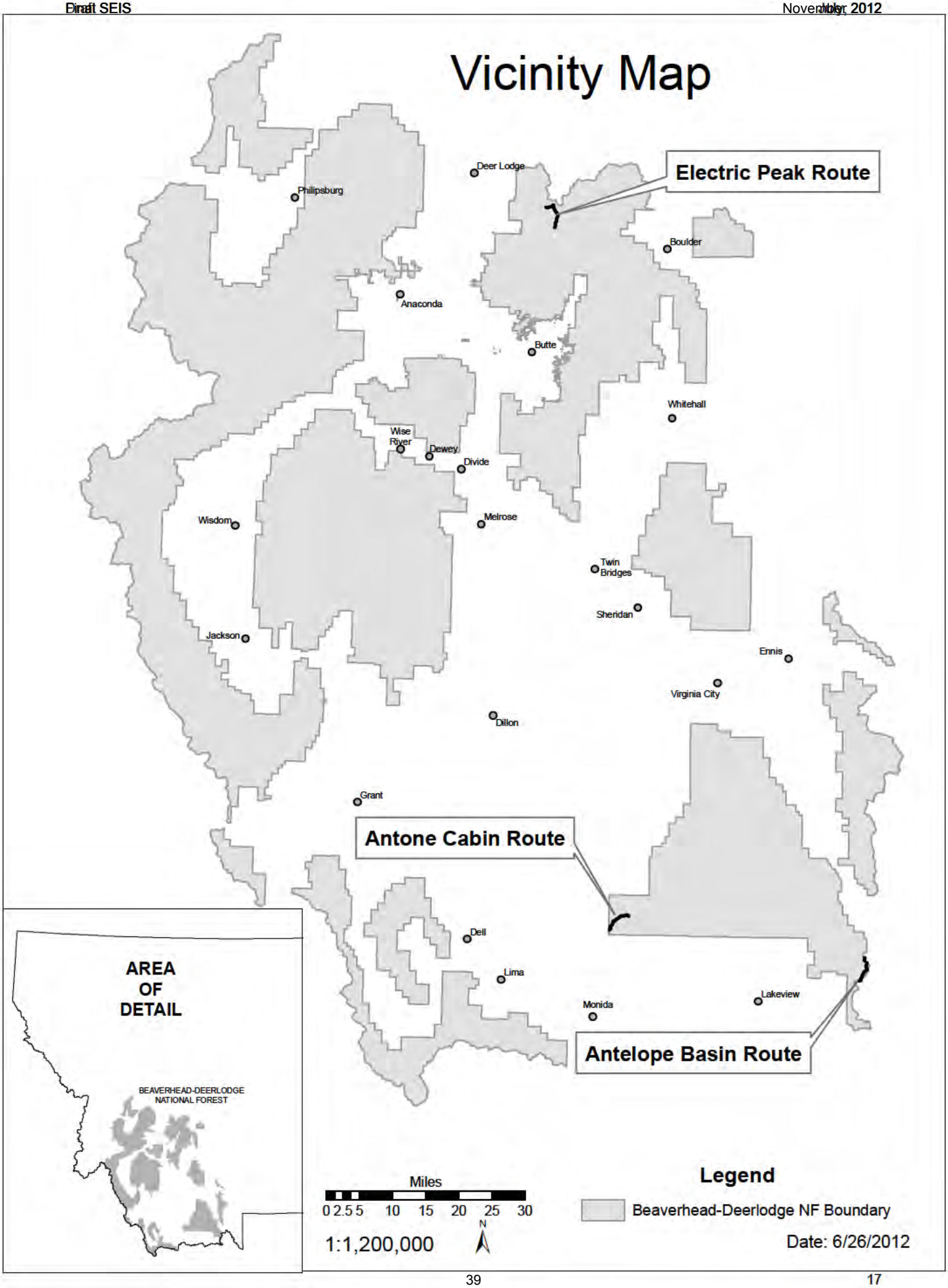
Beaverhead-Deerlodge National Forest Land

and Resource

Management Plan to

Comply with District of Montana Court Order

Maps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Electric Peak Route
Antone Cabin Route
Antelope Basin Route
Deer Lodge
Philipsburg
Boulder
Anaconda
Butte
Whitehall
Wise River
Dewey
Divide
Wisdom
Melrose
Twin Bridges
Sheridan
Jackson
Ennis
Virginia City
Dillon
Grant
Dell
Lima
Monida
Lakeview
AREA OF DETAIL
BEAVERHEAD-DEERLODGE NATIONAL FOREST
Miles
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1:1,200,000
N
Legend
Beaverhead-Deerlodge NF Boundary
Date: 6/26/2012

Electric Peak Management Area

- Forest Boundary
- Management Area Boundary
- Research Natural Areas (RNA's)
- National Historic, Scenic, and Recreation Trails

Eligible Wild, Scenic, & Recreation Rivers

- Eligible Wild Segments
- Eligible Scenic Segments
- Eligible Recreation Segments

Travel Restrictions

- 91% Summer Motorized Travel Not Allowed
- 55% Winter Motorized Travel Not Allowed
- Winter Motorized Travel Not Allowed Exception

Recreation Allocations

- 0% Inholding
- 0% Wilderness
- 0% Recommended Wilderness

Summer

- 91% Summer Non-motorized
- 9% Backcountry Recreation
- 0% Road-based
- 0% Wilderness Study Area

Winter

- 55% Winter Non-motorized
- 45% Winter Motorized Recreation
- 0% Wilderness Study Area Winter Non-motorized
- 0% Wilderness Study Area

Key Watersheds

- 0% Fisheries Key Watersheds
- 0% Restoration Key Waterhseds

Communication Sites

- Existing
- Proposed

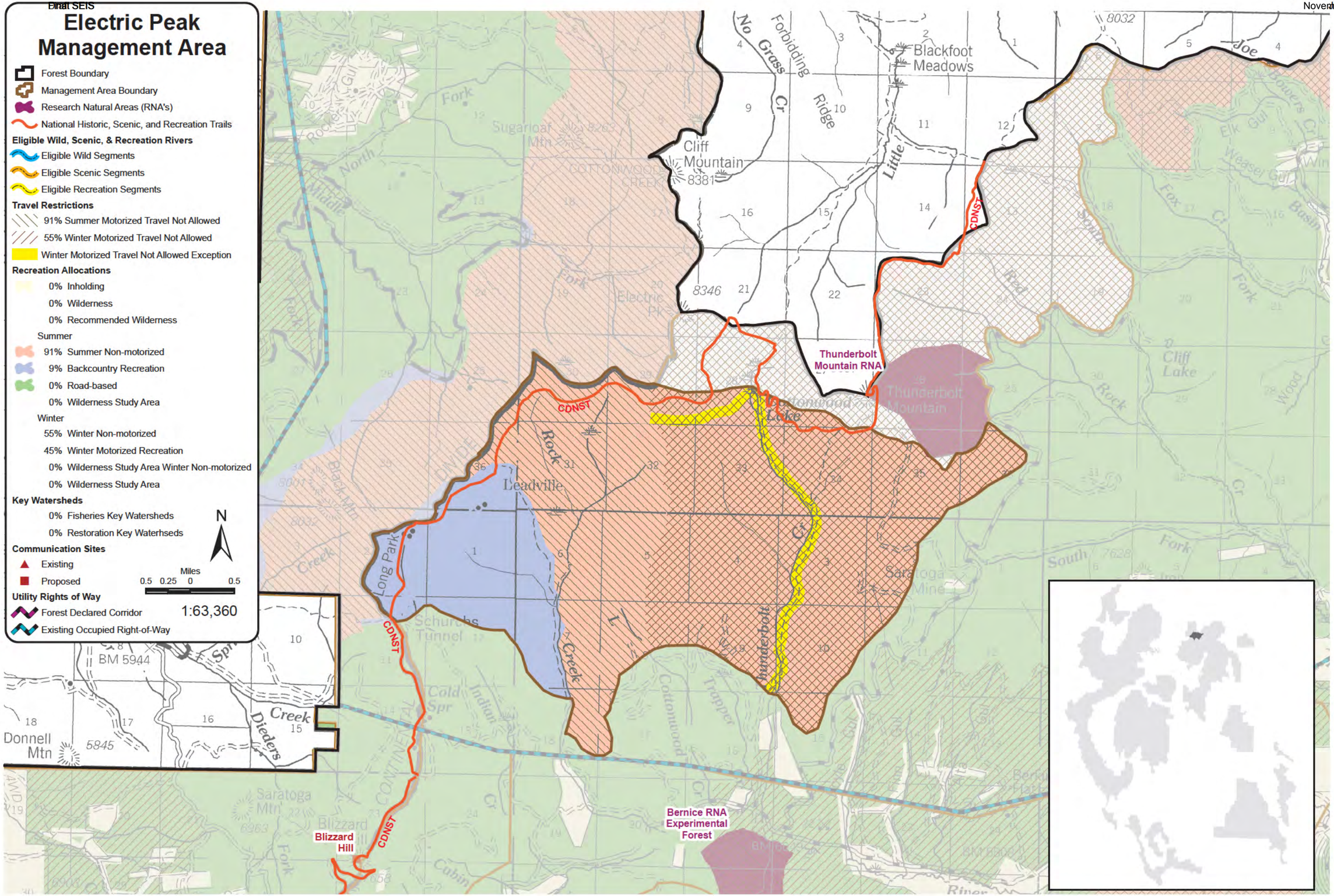
Utility Rights of Way

- Forest Declared Corridor
- Existing Occupied Right-of-Way

N

Miles 0.5 0.25 0 0.5

1:63,360



Antelope Basin Management Area

- Forest Boundary
- Management Area Boundary
- Research Natural Areas (RNA's)
- National Historic, Scenic, and Recreation Trails

Travel Restrictions

- 39% Summer Motorized Travel Not Allowed
- 25% Winter Motorized Travel Not Allowed
- 'Winter Motorized Travel Not Allowed' Exception

Recreation Allocations

- 2% Non-FS Inholding
- 0% Wilderness
- 0% Recommended Wilderness

Summer

- 39% Summer Non-motorized
- 41% Backcountry Recreation
- 18% Road-based
- 0% Wilderness Study Area

Winter

- 25% Winter Non-motorized
- 73% Winter Motorized Recreation
- 0% Wilderness Study Area Winter Non-motorized
- 0% Wilderness Study Area

Key Watersheds

- 0% Fisheries Key Watersheds
- 31% Restoration Key Waterhseds

Eligible Wild, Scenic, & Recreation Rivers

- Eligible Wild Segments
- Eligible Scenic Segments
- Eligible Recreation Segments

Communication Sites

- Existing
- Proposed

Utility Rights of Way

- Forest Declared Corridor
- Existing Occupied Right-of-Way

N

Miles 1 0.5 0

1:63,360

Snowcrest Recommended Wilderness Management Area

- Forest Boundary
- Management Area Boundary
- Research Natural Areas (RNA's)
- National Historic, Scenic, and Recreation Trails

Travel Restrictions

- 100% Summer Motorized Travel Not Allowed
- 100% Winter Motorized Travel Not Allowed
- 'Motorized Travel Not Allowed' Exceptions

Recreation Allocations

- 0% Non-FS Inholding
- 0% Wilderness
- 100% Recommended Wilderness

Summer

- 0% Summer Non-motorized
- 0% Backcountry Recreation
- 0% Road-based
- 0% Wilderness Study Area

Winter

- 0% Winter Non-motorized
- 0% Winter Motorized Recreation
- 0% Wilderness Study Area Winter Non-motorized
- 0% Wilderness Study Area

Key Watersheds

- 0% Fisheries Key Watersheds
- 0% Restoration Key Waterhseds

Eligible Wild, Scenic, & Recreation Rivers

- Eligible Wild Segments
- Eligible Scenic Segments
- Eligible Recreation Segments

Communication Sites

- Existing
- Proposed

Utility Rights of Way

- Forest Declared Corridor
- Existing Occupied Right-of-Way

N

Miles
1 0.5 0 1

1:100,000

Cottonwood Creek RNA

Divide Comm Site

Antone Pk Comm Site

APPENDIX C

Final SEIS For the

Beaverhead-Deerlodge National Forest Land

and Resource

Management Plan to

Comply with District of Montana Court Order

Comments on Draft SEIS and Responses

DRAFT SUPPLEMENTAL EIS (DSEIS) COMMENTS and RESPONSES

Letter Log

Letter No.	Comment Author
1	Deer Lodge Snowmobile Club
2	Don Wallace
3	U.S. Department of Interior
4	Wildlands CPR, Montanans for Quiet Recreation & Friends of the Bitterroot
5	Greg Warren
6	Blue Ribbon Coalition

Letter No. 1 – Deer Lodge Snowmobile Club

Comment No.	Letter 1 Comment and Response
1.1	**Comment:** *I am in favor of keeping all three of the winter travel routes open and available for use by the public. I have used the Thunderbolt-route and I can see no winter impact on either animals or vegitation [sic], please keep it open. I have used the Antelope Basin-route and I can see no winter impact on either animals or vegitation [sic], please keep it open. I have not use [sic] the Snow Crest Route, but I would like to see it remain open as well.* **Response:** Thank for you your comment supporting the 2009 Forest Plan decision allowing exceptions to the winter non-motorized allocations for the road to Antone Cabin, Road #056 corridor and the Electric Peak area.

Letter No. 2 – Don Wallace

Comment No.	Letter 2 Comment and Response
2.1	**Comment:** *As a local resident and owner of nearby recreational property, I support continuing snowmobile access on the Electric Peak area trail as it has been in the past.* **Response:** Thank you for your comment supporting the 2009 Forest Plan decision allowing an exception to the winter non-motorized allocation in the Electric Peak area for continued snowmobile use.

Letter No. 3 – U.S. Department on the Interior

Comment No.	Letter 3 Comment and Response
3.1	**Comment:** *The U.S. Department of the Interior (Interior) has reviewed the Draft Environmental Impact Statement for the Beaverhead-Deerlodge National Forest Land and Resource Management Plan…and has no comments.* **Response:** N/A

Letter No. 4 – Wildlands CPR, Montanans for Quiet Recreation and Friends of the Bitterroot

Comment No.	Letter 4 Comment and Response
4.1	**Comment:** *While the DSEIS does speak to the minimization criteria in E.O. 11644, the analysis relies too heavily on general and conclusory statements in the BDNF 2009 Revised Forest Plan (RFP) landscape scale analysis, which did not take a hard look at site-specific impacts. Without a review of the site specific impacts of the designation of winter motorized routes, the Forest is unable to demonstrate how it is meeting the minimization criteria*. **Response:** Many of the effects related to the minimization criteria in E.O. 11644 from continued snowmobile use of the Electric Peak, Antelope Basin and Antone Cabin routes must be considered in context with their setting (i.e. the areas and landscapes surrounding them). Therefore, we believe the broader discussions from the Corrected FEIS are quite relevant and necessary. Route specific related effects are disclosed in the FSEIS and, to respond to yours and other comments, additional analysis was included in the FSEIS. These routes have been open to, and used by, snowmobiles for decades. The discussions in the FSEIS are grounded in the actual use and outcomes of that use over time.
4.2	**Comment:** *Furthermore, possibly an even greater failing of the analysis is the narrow scope of the DSEIS that focused only on three trails instead of all the oversnow vehicle routes designated in the RFP decision, which arbitrarily constrained the analysis.* **Response:** The only routes specifically identified for snowmobile use in the 2009 Forest Plan are the three "winter motorized travel not allowed exceptions" described in the FSEIS. No other routes are specifically delineated in the Forest Plan for snowmobile use. The April 2, 2012 Court Order states, "…the Revised Forest Plan specifically closes *areas* of the Forest to snowmobiling that were of particular concern due to potential disruption of the environment, wildlife, and non-motorized recreational uses. (CFEIS, 20). This focus on *area* designations as opposed to *route* designations appear premised on the notion that snowmobiles are not always confined to specific routes in open areas." Furthermore, Judge Molloy found that "To the extent that snowmobiles are allowed free rein in open use areas, the Forest Service's area- level application of the minimization criteria meets the requirements of E.O. 11644." Except for the three routes analyzed in the FSEIS, all other routes currently groomed or marked for use by snowmobiles are located in areas allocated to winter motorized opportunities in the 2009 ROD. As a result, snowmobile use in *areas* allocated for winter motorized opportunities occurs both on and off system trails or roads. In these *areas*, winter motorized travel is allowed on trails and roads (some of which are marked and/or groomed) but use is not restricted to those routes. At their discretion/desire, users can ride on the route, adjacent to the route, crisscross the route or off the route because the 2009 ROD allocated the *area* to winter motorized opportunities. For this reason, none of the groomed or marked snowmobile routes located within winter motorized allocations are delineated on maps in the 2009 Forest Plan. It is important to note all areas (and subsequently groomed or marked snowmobiles routes within those areas) allocated to winter motorized opportunities were already open to snowmobile use prior to the 2009 Forest Plan.

Comment No.	Letter 4 Comment and Response
	Please refer to responses to Comments 4.4 through 4.7.
4.3	**Comment:** *The DSEIS explains,* o *This SEIS evaluates the potential effects relevant to applying the minimization criteria established by EO 11644 at the route-specific level where snowmobile routes were designated in the 2009 Forest Plan, as directed by the U.S. District Court for the District of Montana in an Order dated April 2,2 012. (p. 2)* *Unfortunately, while this statement reflects the order's intent, the Forest Service failed to evaluate all snowmobile routes designated during the forest planning process, and instead only focused on the three routes that were specifically named. Judge Molloy's intent was for the Forest Service to apply the minimization criteria to all routes the agency specifies for snowmobile use through the Forest Plan, which includes many more than just the three displayed on RFP maps.* **Response:** Please refer to responses to Comments 4.2 and 4.4 through 4.7.
4.4	**Comment:** *Ultimately, the issue rests on the definition of "designate," and if it only applies to the routes displayed on the RFP maps. Obviously, the most pertinent Forest Service definition does not apply since the BDNF did not follow procedure in 36 CFR 212.51[8]. Looking at a dictionary, the common definition is:* *To indicate or specify; point out* *To give a name or title to; characterize.* *To select and set aside for a duty, an office, or a purpose[9].* *From this it is reasonable to consider a snowmobile route as one that is identified by the Forest Service (e.g. specified) for winter motorized use and given a label (e.g. name) that communicates the purpose of the route for snowmobile use.* **Response:** You are correct. The 2009 Forest Plan did not "designate" snowmobile routes. Instead, the Forest Plan allocated areas of the Forest to motorized or non-motorized recreation opportunities. Specific to the three routes included in the FSEIS, all three routes are located in areas that were open for winter motorized use prior to the 2009 Forest Plan. In addition, each route was used as a groomed, marked or way snowmobile trail or road prior to the 2009 Forest Plan (AR, A1-11). In this and subsequent comments, we believe you are confusing Revision record statements and documentation about pre-existing uses with decisions made in the Plan. For effects considerations in the Corrected FEIS, these pre-existing uses represented both recreational values and users that could be affected by the Plan's decisions and, at times, cumulative actions relevant to understanding cumulative effects from implementing the various alternatives. As such they were necessary discussions. However, neither elevates them to an actual decision made by the Plan.
4.5	**Comment:** *Looking at the RFP's Corrected Final Environmental Impact Statement (FEIS), and the administrative record, it is clear the BDNF identified many more snowmobile routes than the three considered in the DSEIS. In several places, the Corrected FEIS mentions snowmobile groomed and marked trails that occur throughout*

[8] *Designated Road, Trail, or Area. An NFS road, an NFS trail, or an area on NFS lands that is designated for motor vehicle use pursuant to 36 CFR 212.51 on an MVUM (36 CFR 212.1).*
[9] *See http://www.yourdictionary.com/designate at American Heritage Dictionary 4.*

Comment No.	Letter 4 Comment and Response
	the forest: • *"Alternative 3 reduces snowmobiling on groomed and marked trails by 23% due to the large acres of recommended wilderness. Alternative 6 reduces it by 11% but retains most of the areas popular with current users, including the West Big Hole and Mount Jefferson. Even with some reduction in* ***groomed and marked trails****, there is no evidence that the revised plan will not meet demands for snowmobiling over the planning period under all alternatives." (Emphasis added, p. 231).* • *"Winter motorized use is available on 2,143 miles of trail. Of these, 490 miles are groomed, 286 miles are marked, and an additional 1,366 miles are available for snowmobiles." (p. 353).* • *"Groomed and un-groomed snowmobile opportunities will be provided over the life of the plan." (p. 398).* **Response:** Areas allocated to winter motorized recreation opportunities in the Forest Plan include opportunities for use of groomed and marked trails. However, there is no requirement in this allocation to stay on a trail. In fact, the entire area is open to snowmobiling. The Corrected FEIS attempted to quantify opportunities to help the public with context, however, the indices used to measure effects were the "(a)cres allocated to non-motorized travel in winter (December 2 through May 15) Forestwide and by Landscape" and conversely, the "(a)cres allocated where motorized travel is allowed in winter (December 2 through May 15) Forestwide and by Landscape" (Corrected FEIS, page 347).
4.5a	**Comment:** *Furthermore, the Forest Service admits the FEIS(sic) does not provide the necessary site specific analysis to designate snowmobile trails.* • *In response to a comment requesting the groomed snowmobile trails be linked in the Clark Fork/Flint Landscape, the agency responded, "Meeting the objective to connect these groomed trail systems would require site-specific analysis and coordination with Montana Fish Wildlife and Parks. The questions and concerns brought up in this comment will be addressed when that takes place." (p. 919).* **Response:** This comment restates part of a comment on the Forest Plan DEIS submitted by Montana Fish, Wildlife and Parks (MTFWP) specific to management objectives for the Georgetown Lake Management Area (MA) and the agency response to that comment. To place the above comment in context with the entire comment from MTFWP and the entire agency response, please see Comment 86 on Corrected FEIS pages 918-919. The 2009 Forest Plan identifies, as an objective specific to the Georgetown Lake MA, "Connect Georgetown and Red Lion snowmobile trail systems to create a loop" (Forest Plan, pg. 117). In their 2005 comment letter, MTFWP expressed support for the above MA objective while posing additional questions and identifying administrative processes needing answered/completed before the objective could be met. In response, the agency confirmed that when a site-specific proposal is developed to meet the objective, the questions would be answered as part of the site-specific analysis. At this time, a site-specific proposal to authorize grooming of a <u>new</u>, snowmobile route connecting the Georgetown and Red Lion snowmobile routes has not been developed. The referenced Forest Plan <u>objective</u> allows for and encourages that sort of proposal to meet the desired conditions the Plan envisions. However, again, we believe the commenter is confusing a response about the need for further analysis when or if that proposal is made with a decision of this plan and some non-existent admission the

Comment No.	Letter 4 Comment and Response
	analysis is lacking.
4.6	**Comment:** *Additionally, the RFP's administrative record (AR) contains more examples demonstrating the BDNF identified considerably more snowmobile routes beyond the three shown on the RFP maps:* • *AR Doc. A1-11 "Alt 1 Winter Travel Status Map", titled "BEAVERHEAD-DEERLODGE NF FOREST PLAN REVISION DEIS ALTERNATIVE 1-Existing Condition Winter Travel Status & Snowmobile Trails"* o *This map shows the existing condition for specific groomed, marked and way trails for snowmobile use.* • *AR Doc. F3-18 "Road/trail mile status by alternative & landscape and system route numbers closed by alt 6"* o *This document includes a table (see below[10]) showing total miles of snowmobile routes.* • *AR Doc. H11-07 "Trails & snowmobiles routes by landscapes: titled "All District Identified Snowmobile Routes by Motorized Status by Landscape".* o *Provides a spreadsheet that shows the miles of all snowmobile routes by landscape and the percent of open acres.* *These citations demonstrate the agency has specific knowledge of snowmobile routes forest wide and by landscape, and uses labels such as "way trail, marked and groomed," to differentiate between different types; the BDNF even has a map of these known routes in the AR and there was no justifiable reason to exclude them from the analysis in the DSEIS.* **Response:** See the response to comment 4.4 and 4.5. The US District Court found the Forest Service adequately applied the minimization criteria for areas open to snowmobile use.
4.7	**Comment:** *Furthermore, through categorical exclusions the BDNF authorizes snowmobile clubs to groom routes identified in the RFP with funding they receive from Montana's Snowmobile Grant Program[11]. These clubs typically submit a map displaying routes they will groom, and receive significant funding do [sic] so; see Table 2 below[12].* **Response:** Please see the response to comment 4.4 above. The routes authorized for grooming are all located in areas allocated to winter motorized recreation opportunities and were existing groomed routes prior to the 2009 Forest Plan.
4.8	**Comment:** *From these examples, it is clear the BDNF identified and labeled specific routes for the purpose of snowmobiling, and it is the intent of Judge Molloy's order that these by analyzed to ensure they meet the minimization criteria under E.O. 11644. According to the RFP's AR, the adopted alternative includes 1,904 miles of snowmobile routes, all of which should have been included in the DSEIS. The decision to restrict analysis to only the three routes displayed on the RFP's maps was arbitrary and*

[10] The table referenced in this comment does not fit in the format used here identifying comments and disclosing agency responses. For reference by readers, Table 1 included with this comment is provided at the end of Appendix B.
[11] See http://fwp.mt.gov/recreation/grants/snowmobiles/
[12] The table referenced in this comment does not fit in the format used here identifying comments and disclosing agency responses. For reference by readers, Table 2 included with this comment is provided at the end of Appendix B.

Comment No.	Letter 4 Comment and Response
	capricious, and does not comply with the District of Montana Court Oder. **Response:** Please refer to responses to Comments 4.2 and 4.4 through 4.7. The table provided by this reviewer was prepared during preparation of the Corrected FEIS. The table is a GIS (Geographic Information System) spreadsheet providing tabular data for roads and trails based on differing summer and winter motorized/non-motorized allocations proposed in six alternatives. For Alternative 6, data in this table shows 1,885 miles of groomed, marked or way snowmobile trails within areas allocated to winter motorized use. These trails are not included in the FSEIS because the area is open to snowmobile use during the winter. The only routes specifically delineated for snowmobile use on maps in the 2009 Forest Plan are the three "winter motorized travel not allowed exceptions" described in the FSEIS. No other routes are specifically designated for snowmobile use in the Forest Plan.
4.9	**Comment:** *All these designated snowmobile routes in areas open for winter motorized use must be specifically analyzed, as Judge Molloy ordered. The impacts of winter motorized use can be significant especially where specific routes travel through lynx, mountain goat and wolverine habitats, as well as in big game winter range.* **Response:** Please refer to responses to Comments 4.2 and 4.4 through 4.8 explaining why snowmobile routes located in areas allocated for winter motorized recreation opportunities are not included in the FSEIS. For the exceptions to the winter, non-motorized allocations in Electric Peak, Antelope Basin and Antone Cabin area, the FSEIS discloses there are no impacts to mountain goats, wolverine denning habitat and big game winter range because those habitats are not present along the routes. The FSEIS has been updated to include analysis disclosing compliance with the 2007 Northern Rockies Lynx Management direction.
4.10	**Comment:** *Snowmobile use also impacts small mammals that burrow under the snowpack. Additionally, winter motorized use damages exposed soils and vegetation, especially early or late in the season when there is a greater likelihood of inadequate snow levels; this impact also occurs in places where the wind exposes soil and vegetation. Furthermore, snowmobile pollutants negatively affect water quality and aquatic habitats, especially where they accumulate in areas of frequent use such as along designated routes. These impacts are documented in studies cited in the RFP's AR, as well as those cited in our RFP appeal….These studies and other cited in the AR demonstrate that the BDNF needs to take a hard look at impacts from specific snowmobile route designations in all areas of the forest and demonstrate how such designations meet the minimization criteria.* **Response:** This comment is a summary. The organization submitting this comment provided additional details for each topic raised here. Please refer to the responses for Comments 4.11 through 4.16 for responses to the topics raised.
4.11	**Comment:** *Snow packing by snowmobile use reduces the insulating value of the snow; increases mechanical barriers to small mammal movements beneath it. According to Boyle and Samson (1985) has caused significant damage to browse plants. Jarvinen and Schmid (1971) found that snowmobile compacted snowfields increased the winter mortality of small mammals. They indicated that compaction inhibited mammal movements beneath the snow and subjected subnivian organisms to greater temperature stress. Furthermore, Neumann and Merriam (1972) showed that snowmobile use in Ontario caused significant changes in snow structure and, subsequently, wildlife*

Comment No.	Letter 4 Comment and Response
	behavior. Snowmobiles affected snowshoe hare and red fox mobility and distribution and caused serious damage to browse plants. (Joslin, G. et al. 1999, p 4.8). **Response:** This comment is comprised of excerpts from Effects of Recreation on Rocky Mountain Wildlife: A Review for Montana (Joslin and Youmans 1999) - specifically the section addressing small mammals and their use of subnivian environments. Subnivian environments occur below the snow and in this context for small mammals refer to burrows and runways. Typically, small mammals create under snow burrows and runways in areas naturally protected by above ground vegetation or debris where the weight of the snow is partially supported by an object such as a branch, log or rock (Corn et al, 1992). For this analysis, potential effects from snowmobiles compacting subnivean environments used by small mammals is limited to the route – a system trail in the Electric Peak area and system roads in the Antelope Basin and Antone Cabin areas. To assist readers in understanding the current condition of these routes, photos (in the absence of snow) have been added to the FSEIS. These routes will be maintained free of shrubs, trees, logs and other barriers (regardless of snowmobile use) because they are managed for passenger vehicle use or non-motorized travel outside the winter months. As a result, compaction occurs only on the routes which provide low quality subnivean environments for small mammals due to the absence of access sites for burrows and runways provided by vegetation and debris.
4.12	**Comment:** *Emissions from OHVs, particularly those with 2-stroke engines, can include a variety of contaminants, which may settle directly in wetlands or they may be deposited in snow or directly on soils during rain events, from which they may be mobilized into wetlands. Arnold and Koel (2006), who tested snowmelt runoff exposed to significant snowmobile emissions in Yellowstone National Park, detected benzene, ethylbenzene, m- and p-xylene, o-xylene, and toluene, and although all compounds were within the limits set by the U.S. Environmental Protection Agency, it is not clear what the cumulative impacts of these chemicals may be in watersheds. (Ouren, D.S., et al 2000, p. 26).* **Response:** Please refer to pages 5, 16, and 23 of the FSEIS for analysis of cumulative impacts of snowmobile emissions within watersheds. It indicates there is no substantive basis for concerns over harmful effects to water quality from snowmobile use. Arnold and Koel's research (which you cite above) indicated that even under use levels 10 times higher than we typically see on our more heavily used snowmobile routes, concentrations of these compounds in the snowmelt water coming off the snowmobile trails were thousands of times less than those which would cause environmental concern. Please consider further, the contaminated water that reaches streams is diluted hundreds to thousands of times over by the vast amounts of uncontaminated snowmelt water originating off snowmobile trails in a watershed. Thus, (even with snowmobile pressures increasing 10 times over current levels) contaminant concentrations in a stream would be hundreds of thousands of times less than those which cause environmental concern. Given this, there is absolutely nothing to suggest harmful cumulative effects to water quality from snowmobile emissions are occurring.
4.13	**Comment:** *Documentation and quantification of coyote invasions into deep snow areas of the Intermountain West lends increased legitimacy to the potential impacts on lynx conservation as discussed by Buskirk et al. (2000), and Ruediger et al. (2000). Potential impacts can be classified as either habitat loss-fragmentation and competition.*

Comment No.	Letter 4 Comment and Response
	(Bunnell, et al., 2006, p. 835). **Response:** This comment is an excerpt from Potential Impacts of Coyotes and Snowmobiles on Lynx Conservation in the Intermountain West (Bunnell, et al 2006). The Northern Rockies Lynx Amendment was finalized in 2007 (after the 2006 publication of Bunnell, et al). The Amendment specifically considered the results of more recent research and concluded there was "little evidence that compacted snowmobile trails increased exploitation competition between coyotes and lynx during winter on our study area" (Northern Rockies Lynx Management Direction ROD, page 23). Guidelines for management of snow compaction in occupied lynx habitat are included in the 2007 Northern Rockies Lynx Management Direction (NRLMD). Guideline HU G11 states, "(d)esignated over-the-snow routes or designated play areas should not expand outside baseline areas of consistent snow compaction, unless designation serves to consolidate use and improve lynx habitat…." The FSEIS has been updated to disclose potential impacts to lynx habitat and compliance with applicable NRLMD standards and guidelines.
4.14	**Comment:** *Because mountain goats are sensitive to loud noises, snowmobiles and helicopters could affect their behavior depending upon the proximity and duration of the disturbance (Singer and Doherty 1985, Pedevillano and Wright 1987, Cote' 1996). (Olliff, T. 1999, p. 91).* **Response:** MTFWP mountain goat distribution maps show no known mountain goat populations near the Electric Peak or Antelope Basin routes. The MTFWP mountain goat distribution map does show overlap with the Antone Cabin route. In this area, mountain goats have been observed at higher elevations on Antone Peak approximately 2 miles east of the road terminus, south facing slopes of Sawtooth Peak approximately 1.5 miles north of the route, and 6 miles further north at Sunset Peak (Art Rohrbacher, personal communication). All of these areas are closed to snowmobiles in the 2009 Forest Plan. Because mountain goats are not present along the three routes analyzed in the FSEIS, there would be no effect to mountain goats from snowmobiles using the routes.
4.15	**Comment:** *While a trend toward more mild winter conditions should have resulted in more elk, use at the same time, intensive recreational snowmobile use of the Boulder River country has increased and appears to have precipitated elk redistribution away from their normal winter range. (Joslin, G. 2000, p. 9).* **Response:** Because the three routes identified in the FSEIS are not located on mapped elk winter range, there would be no effect to wintering elk from snowmobiles using the routes.
4.16	**Comment:** *Female wolverines are negatively impacted by snowmobiles near their den sites. AR Doc. A1-40, Corrected FEIS at p. 513. Snowmobile disturbances can have adverse effects on survival of their young. AR Doc. A1-40, Corrected FEIS at p. 513 and Appendix B, at p. 98.* **Response:** Because the three routes identified in the FSEIS are not located in wolverine denning habitat, there would be no effect to denning wolverines from snowmobiles using the routes.
4.17	**Comment:** *Even if the DSEIS's scope was sufficient, its analysis still failed to demonstrate how specific snowmobile designations met the minimization criteria, primarily because much of the analysis is based on the RFP's FEIS(sic) that Judge*

Comment No.	Letter 4 Comment and Response
	Molloy already found to be inadequate for route specific designations. **Response:** Please see our response to comment 4.1. The FSEIS applies the minimization criteria in Section 3(a) of EO 11644 to the three routes delineated as exceptions to winter non-motorized allocations in the Forest Plan.
4.18	**Comment:** *Furthermore, the analysis fails to take into account unauthorized use, which could have significant impacts since the three routes analyzed in the DSEIS are surrounded by protected areas.* **Response:** This comment does not identify any unauthorized use, nor for that matter, any significant impacts associated with snowmobile use on the three routes. Monitoring of winter motorized use subsequent to the 2009 Forest Plan does not document a high level of concern for unauthorized winter, motorized use in areas of similar use. Monitoring of five winter non-motorized allocations in the Clark Fork Flint landscape in 2009 found "Human incursions into monitored winter habit do not appear to be a concern at this time" (Forest Plan Monitoring and Evaluation Report, Fiscal Year 2009, pg. 62). Monitoring in the Clark Fork Flint, Big Hole, Lima Tendoy, Upper Clark Fork, Jefferson River and Tobacco Root landscape in 2010 (report yet to be published) indicates low to no winter motorized use in non-motorized allocations at a time before the areas were actually closed and education and enforcement activities began. Monitoring data from 2011 and 2012 is currently not available. For the three routes analyzed in the FSEIS, the agency is unaware of any unauthorized use by snowmobiles resulting in significant impacts off the designated route. 2009 and 2010 monitoring data indicates unauthorized use is expected to be low or non-existent in areas of similar use.
4.19	**Comment:** *Each section discussing specific snowmobile routes cites that RFP's FEIS that states:* o *The FEIS finds impacts from snowmobile use on the BDNF to soil and vegetation are benign since these resources are buffered by snow during snowmobile use and the tracks vanish with snow melt (FEIS, page 289). (DSEIS, p. 4, 7, 10)* *The above assertion and cite to the FEIS does not constitute a hard-look or route-specific analysis. It is general and conclusory, without using any actual measures or an effects indicator, which in this case would be snow depth. The DSEIS contains no discussion of typical snow depths and the times of year they occur. Just how much snow is needed to buffer soil and protect vegetation? It is well, established that if snowmobiles are driven over snow with inadequate depth, the underlying soil and vegetation are damaged. Furthermore, there is no discussion about impacts from inadequate snow cover in the early and late season, or how climate change may be affecting the times when there is adequate cover.* **Response:** Snow provides a buffer protecting soil and vegetation from the effects of snowmobile use whether that use occurs in an area (as disclosed in the Corrected FEIS) or to a route (as disclosed in this FSEIS). The analysis requested in this comment is not necessary because (1) Forest Service regulations prohibit the use of snowmobiles if there is insufficient snow such that there would be damage to soil and vegetation (36 CFR 261.12[c] and 261.13[h]) and (2) the route surfaces are designed for recreation use during the summer season (two roads capable of passenger vehicle use and a trail maintained for summer non-motorized travel). To assist readers in understanding the current condition of these routes, photos (in the absence of snow) have been added to

Comment No.	Letter 4 Comment and Response
	the FSEIS. These photos show that the routes exist as compacted soil without vegetation and will be maintained in this condition for public travel during the summer months. Based on decades of experience maintaining these routes with this same use, there has been no evidence that snowmobile use has damaged soil or vegetation on, or along, them.
4.20	**Comment:** *A comprehensive literature review of winter recreation impacts to wildlife in the Greater Yellowstone Area included discussion on vegetative impacts from snowmobile use and found the following:* o *Snowmobiles often run over trees and shrubs tearing the bark, ripping off branches, or topping trees.* o *Studies (Neumann and Merrian 1972; Wanek 1971, 1973) indicated that conifers differed in tolerance of snowmoible traffic, and that pine species (e.g., Pinus contorta) were less susceptible to damage than spruce species (e.g., Picea glauca). Wanek and Schumacher (1975) found that young conifers were severely damaged by minimal snowmobile traffic. Depth of snow accumulation was the greatest factor contributing to snowmobile damage to conifers.* o *Early spring growth of some species may be retarded or may not grow under a snowmobile trail. This could potentially reduce the diversity of plants species available and/or reduce the quantity of available forage and the duration of forage availability for wildlife during the springs. (Olliff, et. al. 1999. P. 120).* *…The DSEIS did not consider these potential impacts to soil or vegetation.* **Response:** This comment is comprised of excerpts from the habitat chapter of Effects of Winter Recreation on Wildlife of the Greater Yellowstone Area: A Literature Review and Assessment (Olliff, et. al. 1999). Management guidelines for this section of the literature review conclude that activities occurring on roadbeds and trails have little effect on vegetation as the areas are already compacted or disturbed (Olliff et. al. 1999, pg. 120). This comment does not identify any vegetative impacts from snowmobile use on the specific routes. The FSEIS did not consider these potential impacts to vegetation because the routes are devoid of vegetation and there is no indication that the vegetative effects described by Olliff, et al (1999) are occurring. To assist readers in understanding the current condition of these routes, photos (in the absence of snow) have been added to the FSEIS.
4.21	**Comment:** *This same review also included discussion of potential soil impacts stating,* o *Soil temperature can also be affected by snowmobile compaction of snow. Wanek (1971, 1973) and Wanek and Schumacher (1975) observed that surface soil temperature under compacted snow was erratic and constantly lower than under uncompacted snow. Soils in the areas where snowmobiles traveled thawed later than where snowmobiles did not travel (Wanek and Schumacher 1975). This resulted in subsequent deep freezing that could affect the survival of many vegetative species. (Olliff, et a. 1999. P. 119).* o *Snowmobile activities may indirectly contribute to erosion of trails and steep slopes. If steep slopes are intensively used, snow may be removed and the ground surface exposed to extreme weather conditions and increased erosion by continued snowmobile traffic. The same results could occur when snowmobiles use exposed southern exposures. Because compacted snow generally takes longer to melt, trails are often wet and soft when the surrounding areas are dry. Consequently, these trails are susceptible to*

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	damage by other users during the spring (Masyk 1973). Olliff, et al. 1999. P. 120). *The DSEIS did not consider these potential impacts to soil or vegetation.* **Response** This comment is comprised of excerpts from the habitat chapter of Effects of Winter Recreation on Wildlife of the Greater Yellowstone Area: A Literature Review and Assessment (Olliff, et. al. 1999, pg.119-120). Management guidelines for this section of the literature review conclude that activities occurring on roadbeds and trails have little effect on vegetation as the areas are already compacted or disturbed (Olliff et. al. 1999, pg. 120). The FSEIS appropriately considered potential impacts to soils from snowmobiles on the routes. The routes are maintained to provide a compacted soil surface, free of vegetation, for use by passenger vehicles or summer, non-motorized traffic. The potential impacts described in this comment are not occurring on the routes because vegetation is absent and the slopes are not overly steep. There is no site-specific evidence that snowmobile use on these routes is contributing to soil erosion. To assist readers in understanding the current condition of these routes, photos (in the absence of snow) have been added to the FSEIS.
4.22	**Comment:** *Regarding Divide Creek Rd #056, the analysis did state, "[u]se on the route is moderate as loop opportunities are provided only in good snow years," (p. 7), which acknowledges snow depth is not always adequate and in these instances there is an increased potential to damage soil and vegetation. However, the DSIES [sic] does not explain what "good snow years" actually mean or at what depths moderate use occurs and if use at that time harms soil or vegetation.* **Response:** There is no site-specific evidence that snowmobile use on Road #056 is contributing to soil erosion. To assist readers in understanding the current condition of this route, a photo (in the absence of snow) and a vicinity map have been added to the FSEIS. In addition, Road #056 is only open to snowmobile use when snow depth makes it impassable to wheeled, passenger vehicles. When Road #056 is <u>not</u> covered in deep snow, the route is open to use by wheeled vehicles. We have removed the reference to "good snow year" from the FSEIS as it is highly subjective and dependent on an individual user's perspective. Instead, we provided additional information about snowmobile access to the general area around Raynolds Pass and the role this route plays in connecting areas open to winter motorized use. Also see the response to comment 4.19 above.
4.23	**Comment:** *Finally, for each route all the sections discussing potential wolverine impacts from snowmobile use state, "…the trail is not covered by persistent spring snow pack…," (p. 5, 8, 10). Given this acknowledgement, the DSEIS should have better analyzed potential damage to soil and exposed vegetation along each side of the routes.* **Response:** Please refer to agency responses to comments 4.19 through 4.22. There is no site-specific evidence that snowmobile use on any of the routes is contributing to soil erosion or impacting vegetation. Concerning impacts to wildlife and wildlife habitat, the Draft SEIS states, "The trail is also not located in wolverine denning habitat (AR H17-02). Furthermore, the trail is not covered by persistent spring snow pack and the trail elevation is below the elevation break for wolverine (Copeland 2010)". In this context, persistent spring snowpack is defined in relation to wolverine den sites, not snow in sufficient depth to buffer

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	vegetation and soil.
4.24	**Comment:** *Furthermore, when discussing potential impacts to water quality, the DSEIS continues to make general, conclusory statements unsupported by any detailed analysis, instead referencing the RFP's FEIS:* o *Water quality has not been an issue with snowmobile use of this trail in the past. While Trail #7065 generally follows Thunderbolt Creek for much of its length, snow, terrain, and use patterns appear to be providing adequate protection. Risks for water contamination are highest near concentrated use areas such as snowmobile staging areas or parking lots if they occur close to water (FEIS, pg. 137.) (DSEIS, p. 4).* o *Water quality has not been an issue with snowmobile use on this road in the past. Road #056 is located on the Continental Divide; there is no nearby water other than a few small springs. Snow, road design, and use patterns appear to be providing adequate protection. Risks for water contamination are highest near concentrated use areas such as snowmobile staging areas or parking lots if they occur close to water (FEIS, pg. 137). (DSEIS, p. 7* o *Water quality has not been an issue with snowmobile use on this road in the past. Road #325 crosses tributaries to the South Fork of Blacktail Deer Creek with a bridge and culverts; snow, road design, and use patterns appear to be providing adequate protection. Risks for water contamination are highest near concentrated use areas such as snowmobile staging areas or parking lots if they occur close to water (FEIS, pg. 137). (DSEIS, p. 10)* *For all three snowmobile routes, the DSEIS fails to explain how the BDNF determined water quality has not been an issue or how snow, use patterns and road design minimize potential water quality impacts. Simply because a bridge or culvert may be present does not necessarily preclude water quality concerns, especially given the acknowledgement that snow depths are variable and may not be sufficient in the early and late season. Pollutants accumulated along these routes over a winter season may reach creeks and tributaries during the spring melt, yet DSEIS fails to acknowledge this potential impact; a bridge or culvert is not likely to stop pollutant delivery.* **Response:** An analysis of effects to water quality from snowmobile emissions has been added to the FSEIS. Please see pages 5, 16, and 23. It indicates even if snowmobile pressures increased by 10 times over what we are currently experiencing on our more heavily used trails, snowmelt water coming directly off the trails (where contamination is concentrated and primarily confined) would still have contaminant levels thousands of times less than those which cause environmental concerns. Please consider further, contaminated water that reaches streams is diluted hundreds to thousands of times over by the vast amounts of uncontaminated snowmelt water originating off snowmobile trails in a watershed. Thus, (even with snowmobile pressures increasing 10 times over current levels) contaminant concentrations in a stream would be hundreds of thousands of times less than those which cause environmental concern. Given this, there is absolutely nothing to suggest harmful effects to water quality from snowmobile emissions are occurring.
4.25	**Comment:** *Interestingly, the analysis explains that the exemption for Tr. #7065 was supported by Montana Fish, Wildlife and Parks, but in its comments the departments states,* o *Special note should be made that the frozen surface of Cottonwood Lake is intensively used by snowmobiles, and that approximately 30% of all fuel passes*

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	through two-stroke engines, thus emitting the photo toxic compounds MTBE and PAH into Thunderbolt Creek - a Westslope cutthroat trout stream. (AR Doc. G5-06, p. 9) *The DSEIS fails to address this concern or discuss any cumulative impacts to the lake from current and possible increases in OSV use as a result [sic] the snowmobile route designation. In fact, the BDNF restricts its analysis to only the 5.3 mile snowmobile route, part of which follows the edge of Cottonwood Lake, so it is likely use and cumulative impacts to the lake will be significant. Additionally, the DSEIS's statement that water quality is a concern in concentrated areas of use should have led the BDNF to analyze potential impacts to the lake and other such areas, but instead the DSEIS only focuses on staging areas and parking lots with the explanation, "there is no set parking/staging area and winter recreationists may arrive at the trail from a number of possible parking/unloading locations usually five or more miles from the trail," (p. 4).Identifying staging areas and parking lots as places of concentrated use, and then dismissing their impacts because there is no set place is a classic straw man argument that discounts the obvious fact that the concentrated use occurs on the snowmobile route itself, especially given that recreationists arriving from several different staging areas must stay on the route. The DSEIS failed to account for potential water quality impacts to Thunderbolt Creek and Westslope cutthroat trout from fuel concentrated along the snowmobile route or on Cottonwood Lake.* **Response:** MTFWP has been contacted to discuss their comment related to effects of methyl tert-butyl ether (MTBE) and polycyclic aromatic hydrocarbons (PAHs) on westslope cutthroat trout in Thunderbolt Creek and Cottonwood Lake. MTFWP research indicates this is not an issue in these areas. We will provide them our analysis of water quality effects and risks to cutthroat from these compounds. The analysis indicates there is no substantive basis for concerns over harmful effects to water quality or cutthroat trout from snowmobile use. Arnold and Koel (2006) researched risks associated with MTBE and other compounds from snowmobile emissions and found them to be non-substantive; even under use levels 10 times higher than we typically see on our more heavily used snowmobile routes. MTBE, was one of 4 volatile organic compounds (VOCs) that never reached detectable limits in their study. In addressing PAHs, Arnold and Koel stated concern about the concentrations of these compounds in snowmelt water from Old Faithful Parking lot. They indicated, however, they probably resulted from vehicular oil and petroleum products left on the parking area during the summer season. Thus, their concerns were unrelated to snowmobile use. Rhea et. al. (2005)'s evaluation of PAHs in water, snow and sediments from Lakes in Grand Teton National Park, Wyoming is the most applicable research regarding PAH effects to water quality on the BDNF. They found PAH's from recreational use to be of little concern. This information suggests there is no substantial basis for concerns related to snowmobile emission contamination related to MTBE and PAHs, especially when considered in context with the comparatively miniscule snowmobile use and concentration levels found on these three routes.
4.26	**Comment:** *The DSEIS repeats this same deficiency with regards to tributaries and creeks along Rd. #056, (includes Poison and Anthill Creeks), as well as along Rd. #325 (Robb Creek and S. Fork-Blacktail Deer Creek). Given the lack of analysis, and the obvious concentration of snowmobile use along designated routes, we the BDNF's conclusion that "[d]egraded water quality from human waste and petroleum products*

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	will not occur since areas of concentrated use are not located along the specified routes" (p. 12) is illogical and unsupported by fact. **Response:** An analysis of effects to water quality from snowmobile emissions has been added to the FSEIS on pages 5, 16, and 23. The analysis indicates, there is no substantive basis for concerns over harmful effects to water quality or from snowmobile use.
4.27	**Comment:** *While harassment of wildlife and significant disruption of wildlife habitat may arguably have been decreased by specific snowmobile route designations, the DSEIS fails to demonstrate that these impacts were in fact minimized in this analysis.; Instead, the BDNF overall continues to make general* **and** *conclusory determinations based on the RFP's FEIS, which incidentally, Judge Molloy already found insufficient to support route-specific designations: e.g. "[t]he Revised Forest Plan specifically addressed how the selected alternative reduced snowmobile impacts to wildlife and wildlife habitat by closing areas to motorized winter recreation," (DSEIS, p. 5, 8. 10). While protecting some areas from winter motorized use may have reduced related impacts, such reduction does not constitute minimization of impacts, especially given the widespread presence of snowmobile routes as we explained above.* **Response:** Potential effects of snowmobile use on the three snowmobile routes delineated in the Forest Plan to wildlife are disclosed in the FSEIS. All other snowmobile routes are located in areas allocated to winter motorized use. Please refer to responses to Comments 4.2 and 4.4 through 4.8.
4.28	**Comment:** *Furthermore, regarding the route along Thunderbolt Creek, the DSEIS states,* o *Snowmobile use on the delineated route also would not alter vegetation characteristics of wildlife habitat in the area because the vegetation is buffered by the snow. In addition, the use of the trail does not impact riparian areas or species associated with riparian areas as use is restricted to the footprint of the existing trail and use is during the winter when it has negligible impact. (p. 5).* *As previously stated, this explanation discounts times when there is inadequate snow cover, as the analysis admits in its wolverine discussion, and the route appears to travel along the creek and therefore within the riparian zone. However, the DSEIS does not explain the routes proximity to the riparian area, or potential impacts, even assuming use stays restricted to the route and no illegal use occurs. As stated above, accumulated pollutants from the route may have the potential to affect water quality, and the potential to impact wildlife dependent on riparian areas may be even more concerning given the routes location to the creek. During the spring melt, riparian areas absorb snowmobile pollutants accumulated throughout the season, which could negatively affect riparian dependent species. The same concerns apply to riparian areas for snowmobile routes in Antelope Basin and Antone Cabin areas.* **Response:** An analysis of effects to water quality from snowmobile emissions has been added to the FSEIS. It addresses the potential for accumulated or cumulative effects to water quality. Please see FSEIS pages 5, 16, and 23. The analysis indicates there is no substantive basis for concerns over harmful environmental effects associated with pollutants derived from snowmobile emissions.
4.29	**Comment:** *Regarding big game winter and wolverine habitat, the analysis claims that because none of the snowmobile routes travel through these areas impacts are minimized. While impacts may be reduced in the areas protected from cross country*

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	winter motorized use, the route along Rd. #056 leads to a winter motorized area, and therefore serves as a primary entry point: o *Recreational users access the BDNF portion of the road from Highway 287 in Idaho, travel through an area open to snowmobiles on the Caribou-Targhee National Forest, through a winter, non-motorized area using the Road #056 corridor on the BDNF and back onto an open area in Idaho or other open areas in the Centennial Valley in Montana. (DSEIS, p. 7).* *Given this fact, the analysis should have addressed the cumulative impacts to wolverine and big game habitat in the Centennial Valley. The DSEIS notes, "…in the Gravelly landscape the percent of big game winter range closed went 19% to 49% and the percent of wolverine denning habitat closed to snowmobiles increased from 25% to 79% (FEIS, pg. 510)," (p. 8). Simply repeating these percentages from the RFP's FEIS does not explain how snowmobiles utilizing Rd. #056 affect habitat conditions in the open areas of the Centennial Valley.* **Response:** The analysis disclosed in the FSEIS has been clarified to address this comment (FSEIS, pages 17, 2nd and 3rd paragraphs under Wildlife and Wildlife Habitat)
4.30	**Comment:** *While non-motorized winter recreation opportunities are generally not affected in the areas protected from winter motorized use, the areas adjacent to the three snowmobile routes evaluated in the SDEIS, are impacted by engine noise and exhaust. The DSEIS failed to disclose how much of the protected area would be subject to these impacts. For example, the analysis explains,* o *In the Antelope Basin MA, skiing and snowshoeing opportunities in the absence of snowmobile use is available on about 5,500 acres. The 4.6 miles of snowmobile trail occurs along the east edge of this non-motorized are adjacent to open areas in Idaho. (p. 9)* *However, the DSEIS does not analyze how many of these 5,500 acres are affected by noise from the adjacent snowmobile trail.* **Response:** Additional analysis of effects to non-motorized recreation opportunities has been added to the FSEIS.
4.31	**Comment:** *Additionally the SDEIS does not explain if any non-motorized trails exist in proximity to the snowmobile routes, or if any have been proposed.* **Response:** No winter, non-motorized trails exist, or are proposed, in the vicinity of the Electric Peak, Antelope Basin or Antone Cabin routes. Most of the Electric Peak route is a system, non-motorized trail during the summer (Forest Plan, pg. 94). A proposal is being considered for a non-motorized trail in the general vicinity of the Electric Peak route for providing mountain bike opportunities around the Electric Peak Recommended Wilderness Area (Forest Plan, pg. 96-97). This proposal is still being developed but does not alter winter recreation opportunities. There are no non-motorized system trails on the BDNF in the vicinity of the Antelope Basin route (Forest Plan, pg. 128). The road into Antone Cabin provides motorized access during the summer to several non-motorized system trails that start along the road or at the trailhead located at the end of the road (Forest Plan, pg. 152).
4.32	**Comment:** *Furthermore, the 4.6 [sic] snowmobile trail in the Antelope Basin MA is*

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	located on the Continental Divide National Scenic Trail (CDNST) which is meant to be managed for non-motorized recreation, yet the DSEIS makes no mention of how snowmobile use complies with the CDNST Comprehensive Management Plan or meets the purposes for which the trail was established. **Response:** Analysis of the portions of the analyzed snowmobile routes coincident with the CDNST has been added to the FSEIS.
4.33	**Comment:** *While the SDEIS failed to take a hard look at specific aspects of snowmobile use on the three routes and thereby did not demonstrate how it met the minimization criteria, such omissions pale in comparison to the complete absence of analysis from unauthorized snowmobile use. The SDEIS contains no discussion of how snowmobiles will be kept to the designated routes, and given the opportunity for violations of the closures, the impacts to forest resources and non-motorized uses could be significant.* **Response:** Please refer to the response to Comment 4.18. Our monitoring of winter motorized use subsequent to the 2009 Forest Plan indicates unauthorized use is expected to be low or non-existent in areas of similar use. The ROD enacting Forest Plan travel management direction was signed in February of 2010. Enforcement of winter non-motorized allocations started December 2, 2010, with emphasis placed on educating users to the new closure orders. Monitoring of closure areas is occurring and will continue. Appropriate education and enforcement measures have and will continue to be taken. Based on winter use monitoring conducted in past years, no significant impacts to Forest resources have been identified.
4.34	**Comment:** *A federal judge in Utah recently chastised the Forest Service for failing to adequately analyze the impacts of illegal use off a designated trail system. See Sierra Club v. USFS p. 11 (D. UT, March 7, 2012) ("the Forest Service's analysis on the interplay between legal and illegal trails in the ROD/FEIS consisted of an introductory statement that it believed that "The extended miles of trail and the creation of motorized loop trails [under the chosen alternative] will result in ATV riders staying on designated routes which over time will lead to greater success in reclamation of previously disturbed areas." OTP06943. The Forest Service failed, however, to provide support for this proposition and failed to discuss any other aspect of the relationship between the alternative chosen and illegal use.")* **Response:** Please see the responses to Comments 4.18 and 4.33.
4.35	**Comment:** *Other rulings also speak to the issue of unauthorized motorized use: "Alternatively, the Forest Service could have shown that its expectations that illegal use would be reduced under all alternatives were not merely wishful thinking. See Sierra Club v. U.S. Dep't of Agric., No. 96-2244, 1997 WL 295308, at *29 (7th Cir. May 28, 1997) (holding under NEPA that an agency must either explain why new enforcement efforts would minimize illegal use or include the impacts of illegal trail use in its analysis); Sierra Club v. Bosworth, 325 F. Supp. 2d 919, 924 (D. Minn. 2005) (same)." Opinion p. 13.* **Response:** Please see the responses to Comments 4.18 and 4.33.
4.36	**Comment:** *Illegal cross country snowmobile use could have serious impacts to wildlife*

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	in areas protected from winter motorized use, and this issue was included in a wildlife survey report from the MT FWP Dept. released in 2000[13]. We are unsure if any subsequent studies of this nature discuss the impacts of illegal snowmobile use on wildlife, but we urge the BDNF to take a hard look at this issue. The 2000 report included the following observations: • *The Thunderbolt-Electric Peak area is a known use area for wolverine. The March 6, 1999 flight report noted: Bison Mtn – 2 snowmobilers observed on the roadless area boundary. Appeared to be stuck. Little Blackfoot and Bison Roadless area – 2+ snowmobile tracks. Illegal use. (p. 9)* • *Comparison of 6 aerial surveys conducted for each of 2 years revealed extensive off-trail use both in the year when grooming was not conducted (1997-98), and the second year (1998-99) when the Red Rock Road was groomed. Numerous actual and potential snowmobile-wildlife conflicts were noted.* ***Grooming clearly did not reduce off-trail travel****. (emphasis added, p. 9)* • *Because snowmobiling on National Forest lands has not been widely restricted to designated routes or areas and because groomed trails are an attraction for snowmobile users, a groomed route can result in more use and more off-trail users, creating burgeoning and cumulative impacts to natural systems that support wildlife. Whether a route is groomed or not, snowmobiling on big game winter ranges is not in the best interest of wildlife. When wildlife are in a survival mode, enduring winter stress, additional disturbance is inappropriate, (p. 11)* *Given these observations, and the likelihood that unauthorized cross country travel will be an ongoing management challenge, the BDNF should analyze how designated snowmobile routes may facilitate illegal use and the related impacts to wildlife and habitat, and how those impacts will be minimized by the new decision.* **Response:** These observations on the Beaverhead- Deerlodge and Helena National Forests by MTFWP were made prior to the 2009 Forest Plan decision when limited area on the BDNF in the Boulder River landscape was closed to snowmobiles. None of the areas described in this comment and located on the BDNF were closed to snowmobiles when MTFWP made the observations in 1997-1999. At the time, 15% of big game winter range and 0% of wolverine denning habitat on the BDNF in the Boulder River landscape was closed to snowmobiles. After the 2009 Forest Plan decision, 44% of big game winter range and 55% of wolverine denning habitat was closed to snowmobiles (Corrected FEIS, pg. 510). Most, but not all, of the Red Rock Road is located on the BDNF in an area currently allocated to winter motorized opportunities (Forest Plan, pg. 90) but the road is <u>not</u> a groomed snowmobile trail (AR , A1-11). Bison Mountain and the Little Blackfoot River are located on the Helena National Forest – not the BDNF. The Bison Inventoried Roadless Area (IRA) is not located on either the Helena or Beaverhead-Deerlodge National Forests. However, Bison Mountain is located within the Electric Peak IRA (located on both Forests). The entire BDNF portion of the IRA was open to snowmobiles prior to the 2009 Forest Plan. The Forest Plan allocated 44% of the Electric Peak IRA on the BDNF to winter non-motorized (Corrected FEIS, pg. C-49).

[13] *Joslin, G. 2000. Final Report: Snowmobile Activity Survey in relation to Wildlife Habitat in portions of the Helena and Deerlodge National Forests. Montana Fish, Wildlife and Parks Region 3 – Helena Area Resource Office. pp. 17.*

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4.37	**Comment:** *The SDEIS failed to take a hard look [sic] the direct, indirect and cumulative impacts of winter motorized use on designated snowmobile routes, or impacts from unauthorized cross country travel. Without such analysis, the BDNF cannot demonstrate how it met the minimization criteria as ordered by Judge Molloy.* **Response:** Please refer to previous responses to comments addressing specific direct, indirect and cumulative impacts of winter motorized use.
4.38	**Comment:** *While the BDNF can correct these failings in a more complete Final SEIS, such analysis will still not comply with the court order since its scope does not include all known snowmobile routes, which for the adopted alternative in the RFP ROD is 1,904 miles.* **Response:** Please refer to responses to Comments 4.2, 4.5, 4.6 and 4.8.

Letter No. 5 – Greg Warren

Comment No.	Letter 5 Comment and Response
5.1	**Comment:** *In review of the document, I didn't find a discussion regarding the effects of the proposed action on the Continental Divide National Scenic Trail (CDNST). The Final SEIS needs to address the requirements of the National Trails System Act, specifically Sec. 7(c); be in compliance with CDNST Comprehensive Plan; and conform to direction in FSM 2353.4. CDNST management direction is within the scope of this SEIS due [sic] the proposed action potential direct, indirect, and cumulative effects on the nature and purposes of the CDNST. Any approval of motor vehicle use on the CDNST should be addressed in the ROD and supported by an objective analysis and finding that the use would not substantially interfere with the nature and purposes of this National Scenic Trail.* **Response:** The Electric Peak and Antone Cabin routes are not located along the CDNST. Road #056 in Antelope Basin is coincident with the CDNST in that area. Analysis of this section of the CDNST and compliance with FSM 2353.4 has been added to the FSEIS.

Letter No. 6 – Blue Ribbon Coalition

Comment No.	Letter 6 Comment and Response
6.1	**Comment:** *It seems the analysis in the DSEIS is sufficient for the purpose outlined by the court order.* **Response:** Thank you for reviewing the Draft SEIS.
6.2	**Comment:** *From our perspective, the flaw in the DSEIS stems from flaws in the 2009 FEIS regarding how the agency chose not to consider designated Wilderness in its disclosure and analysis of impacts to recreational opportunities. Refusing to disclose the considerable opportunity for non-motorized recreation provided in designated Wilderness, both within and adjacent to the Beaverhead-Deerlodge National Forest, resulted in a flawed needs analysis and decision. We expect the agency to consider all that water under the bridge at this point.*

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	Response: Acres of designated wilderness on the BDNF was included with the disclosure of acres available, by alternative, for winter non-motorized recreation opportunities (Corrected FEIS, pg. 356). The Corrected FEIS cumulative effects analysis included an increase in opportunities for non-motorized recreation activities within a 100 mile radius of the BDNF (Corrected FEIS, pg. 400).
6.3	**Comment:** *However, reviewing the SDEIS amplified the loss of both winter and summer motorized uses in the Beaverhead-Deerlodge management plans. These changes must also be considered in the context of other management plans across the region. Over the last three decades, the cumulative loss of OHV and snowmobile opportunity has been profound. Conversely, the expansion of "primitive" and non-motorized recreation opportunity has been equally profound. The cumulative loss of recreational opportunity has become a significant issue in the Beaverhead-Deerlodge and other National Forests in the Northern Region. The amount of OHV and snowmobile closures has reached a critical mass. Every single mile of route that is open to motorized use, and every single acre that is open for snowmobiling, is extremely important.* **Response:** How changes in motorized and non-motorized allocations affected recreation opportunities was analyzed in the Corrected FEIS (pg. 342-402). The FSEIS evaluates potential effects relevant to applying the minimization criteria established in EO 11644 at the route-specific level where snowmobile routes were delineated in the 2009 Forest Plan. We recognize that Blue Ribbon Coalition values the continued use of the routes analyzed in the FSEIS.
6.4	**Comment:** *One could argue that the effort to apply a minimization criteria has been exceeded. In other words, in an effort to apply a "minimization criteria" the agency has gone past the minimum necessary opportunity to provide the public with a legitimate form of recreational use. A use that, when managed, can be provided without significant impacts to natural resources and with considerable socio-economic [sic] benefits. From the perspective of our members, the agency has minimized too much. The cumulative closures over the years has created the need to look for opportunities to enhance snowmobile and OHV opportunity to meet the minimum public demand. We imagine this sort of observation is beyond the scope of the SDEIS. But if land management planning is an adaptive management process that includes social, economic, and ecological evaluation guiding the agency in fulfilling its responsibilities for stewardship of the national Forest System to best meet the needs of the American people, it seems worthwhile to at least give you the perspective of our members and supporters.* **Response:** The minimization criteria established in EO 11644 are disclosed in the FSEIS. These criteria do not include meeting the minimum public demand of OHV opportunities. The 2009 Forest Plan is expected to meet predicted demands for motorized use and improve the quality of motorized opportunities (Corrected FEIS, pg. 364).

Tables Referenced in Comments 4.6 and 4.7

Table 10.Winter Snowmobile Route Status*

Type	Winter Snowmobile Route Motorized Status	Alt 1 Miles	Alt 2 Miles	Alt 3 Miles	Alt 4 Miles	Alt 5 Miles	Alt 6 Miles
Groomed	Motorized Travel Allowed	490	477	477	478	480	490
Marked	Motorized Travel Allowed	286	280	247	282	272	273
Way Trail	Motorized Travel Allowed	1,366	1,260	920	1,358	1,134	1,141

Type	Winter Snowmobile Route Motorized Status	Alt 1 Miles	Alt 2 Miles	Alt 3 Miles	Alt 4 Miles	Alt 5 Miles	Alt 6 Miles
	Motorized Travel Allowed Total	**2,143**	**2,017**	**1,643**	**2,118**	**1,885**	**1,904**
Groomed	Motorized travel NOT allowed by Alternative	0	13	13	12	10	0
Marked	Motorized travel NOT allowed by Alternative	0	6	40	4	14	13
Way Trail	Motorized travel NOT allowed by Alternative	0	106	447	8	233	226
	Motorized travel NOT allowed by Alternative	**0**	**125**	**499**	**25**	**258**	**239**
	Snowmobile Trail Grand Total	**2,143**	**2,143**	**2,143**	**2,143**	**2,143**	**2,143**

**From AR Doc F3-18 (2009 Forest Plan Record.)*

Table 2. Snowmobile clubs that groom routes within the BDNF

Club Title	2012 Funding	2013 Proposed Funding[14]
Anaconda Snowmobile Club	$8,619	$10,089
Beaverhead Sno-Riders	$14,268	$13,555
Big Hole Snowmobile Club	$2,728	$2,596
Deer Lodge Snowmobile Club	$3,531	$3,354
Mining City Trail Riders	$3,370	$3,202
Vigilante Snowmobilers	$17,009	$18,059
Wise River Jackpine Savages	$6,741	$6,404
	$56,266 – Total	$57,259 - Total

[14] See http://fwp.mt.gov/fwpDoc.html?id=56696